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Central Eurasia

Military Affairs

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9 June 1993

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CIS/RUSSIA ARMED FORCES

Lt-Gen Just Muranov on Military Courts

93UM0472A Moscow ARMIYA in Russian
No 21-22, Nov 92 pp 12-15

[Interview with Lt-Gen Justice A. I. Muranov, chief, Military Courts Directorate, Russian Ministry of Justice, by Major N. Kartashov: "A Right to Defense"; date and place not given; first paragraph is ARMIYA introduction]

[Text] Military tribunals no longer exist in the new Russian Army; there are instead military courts, which came into being as early as the time of Peter I. The Sixth Congress of People's Deputies of the Russian Federation passed an addendum to the Constitution of the Russian Federation incorporating military courts into a unified judicial system. One of the journal's correspondents met with Lieutenant-General of Justice A. I. Muranov, chief of the Military Courts Directorate, Russian Ministry of Justice, putting to him questions answered in the following.

[ARMIYA] Anatoliy Ivanovich, to many of our readers the term "military courts" may be new, but everyone knows that such courts existed in the former Russian Army. Could you tell us something about some periods in which they were active?

[Muranov] Peter I as early as 1702 issued a decree creating in the Army special military courts, which were the first primary agencies of military justice. The lowest level was the Regimental Court; the highest, the General Military Court. The highest judicial authority in the Army was headed by an Auditor General. The courts were not permanent agencies, but were set up temporarily to examine a particular case. In addition, provided for in wartime was the setting up of so-called "Summary" Courts, which constituted the prototype of Field Courts-martial.

Judicial system reforms instituted in the 19th century affected the Army as well. Set up in the Army were military justice agencies. They were independent of administrative agencies. That was also a time of the abolition of social estate privileges possessed by the accused and introduction of a procedure for appealing of sentences.

The courts after 1917 came to be known as "Revolutionary Military Tribunals." Their function was to carry out operational examination of various criminal offenses committed by military personnel. The Revolutionary Military Tribunals were eliminated in the 1920s, and military justice cases then came under the purview of the territorial courts. However, civilian judges possessed little knowledge of the particulars of military service and of military law. For that reason, Revolutionary Military Courts were reinstated in districts and fleets, and in 1926 renamed as "Military Tribunals." They were referred to as such until spring of this year.

[ARMIYA] This may be a crude question, but I will ask it anyway. Why is it that a large number of people, especially of the older generation, think of the Military Tribunals as nothing more than punitive agencies?

[Muranov] In the history of the Military Tribunals there are sad aspects. The conditions associated with Stalin's arbitrary rule, which reigned in the country in the 1930s and 1950s, affected military tribunal activity as well. In addition, not all judges possessed sufficient courage to withstand the pressure exerted by investigative agencies, particularly the NKVD. Hence the levying of clearly unjust sentences. In this connection, military justice is not restricted to bloody Ulrikh and his associates. Laboring at that time in tribunals was quite a number of honest, decent, and principled judges. They refused to bargain with their conscience, preferring instead to remain on the other side of the judicial barrier. For example, arrested and subjected to repression in 1937 and 1938 alone were district military tribunal chairmen A. Mazyuk, Ya. Zhigur, A. Kozlovskiy, B. Antonov, and many other military tribunal leaders and sitting judges. All these things are a lesson of the past. Nonetheless, this is not to say that we should forget that or remain silent. In my view, only the truth about those bitter pages of history can serve as a warning against repeating this kind of occurrence in the future.

[ARMIYA] But voices are being raised claiming that military justice agencies are as severe as in the past.

[Muranov] Those who have any degree of familiarity with the activity of military courts do not think that way at all. Military justice agencies are actually ordinary courts, ones charged with the same tasks and functions as people's courts. We in our work are guided by general legislation. This can be of the civil or criminal kind. Concerning severity, well, ... According to statistics, punishments levied by our military courts are less severe. For example, on a yearly basis in the Army and Navy, prison sentences are handed down in about 25 percent of criminal cases, whereas this figure for people's courts is 34 to 36 percent of citizens.

[ARMIYA] You stressed that military courts are guided by general legislation. Why, then, do People's Courts not handle cases involving military personnel?

[Muranov] Yes, People's Courts and Military Courts are indeed both subject to the unified legislation. However, the Army system is quite specific, unlike any other. There are not so many laws and various normative acts in the civilian sector as there are in the Army. Virtually every step, every minute of the serviceman's time is covered by regulations. You have organization of the service, storage and safekeeping of weapons and ammunition. Dealing with all those complexities, even for us, military judges, is not an easy task. Besides, in addition to knowledge of military law, it is necessary to possess a good knowledge of the lifestyle and conditions surrounding the man wearing the uniform and his service. In this connection, there are military courts in the USA,

England, and in other countries. There, in contradistinction to us, in effect is special military law, which governs the military judicial system.

[ARMIYA] Society is suffering an abrupt increase in crime. It is natural that the number of court cases is also on the rise. What is the law enforcement situation in the Army and Navy?

[Muranov] The processes occurring in the state are definitely reflected in the Armed Forces. The number of offenses committed by military personnel last year rose by 11 percent. Military courts examined about 16 criminal cases, 960 civil cases, and about 8,000 pieces of materials relating to early probational release of persons serving a sentence in disciplinary units.

Especially alarming is the growth in offenses committed by commissioned personnel. This last year exhibited an increase of 24 percent. Officers are often pushed to break the law by the situation in which they serve. This has to do with their poverty-like existence, poor personal comfort situation, etc. Take the following instances, only two of many. Found guilty by a military court was a Major I., who committed theft of spare parts. The monetary amount in this officer's case was 4,000 rubles. He used the money he received by selling the spare parts for the benefit of his family, which included an unemployed wife, three small children, and elderly parents.

And the second instance. The family of Major P, which included many children, had to make do for an extended period of time in a communal apartment, one devoid of conveniences. All the officer's petitions to his military authorities and other agencies went unanswered. The officer, losing all hope, broke into the living quarters section of an ispolkom and threatened to kill officials if they did not provide his family with living quarters. There is no way I can justify the actions of these servicemen. However, the causes forcing them to take such a step should come into the focus of attention by those who are obligated to exhibit concern for social protection for persons wearing the uniform and for their dependents.

[ARMIYA] Do military courts take up cases involving generals who commit an offense?

[Muranov] Yes, indeed. We are examining a case involving a rear admiral of the Northern Fleet, and a former PVO [air defense] corps commander.

[ARMIYA] What can you tell us about cases of the infamous hazing of young recruits by older servicemen?

[Muranov] That accounts for one case out of five. About 20 percent of servicemen tried for this kind of offense are sentenced to 2 to 4 years of imprisonment; more than 40 percent are punished by sentencing to a disciplinary battalion; the remainder receive other kinds of punishment.

[ARMIYA] Civilian judges often complain that they are the object of pressure exerted by various agencies of

authority. Is there pressure exerted by military authorities and high-ranking Army leaders?

[Muranov] Attempts to exert pressure did take place during the years political organs existed. That by and large was not pressure per se, but merely the line handed down by the political leadership, including tribunals. Today, unfortunately, there are instances of interference by some people's deputies into matters in progress in military courts. In this connection, this pressure may at times be rather crude and uncalled-for. This is disturbing.

[ARMIYA] Punishment measures the military court levies on conscripts include the disciplinary battalion. However, there are being raised voices, especially of soldiers' mother movements, calling for their elimination.

[Muranov] The disciplinary battalion issue is under discussion. But I feel that the time has not yet come to do away with this kind of unit. We have about 5,000 to 6,000 servicemen sentenced to disciplinary battalions every year. They are for the most part 18- to 20-year olds. Some of them attempted to avoid military service, others caused motor vehicle accidents. Where to send them? To prison, the same kind of environment that exists in the criminal world? Why to cripple the boys' future? The disciplinary battalion is of course the opposite of a correctional labor institution. Men serving in them remain soldiers, live according to Army law, and undergo training. Statistics tell us that, every year, two-thirds of temporary duty soldiers are released ahead of time on probation, continue their service in a field unit, or receive a discharge into the reserve.

[ARMIYA] A Russian leader stated recently that it is necessary to empty Russian prisons of men from the former Soviet republics. Would such an action affect disciplinary battalions, in which there are quite a number of residents of the Transcaucasus, Central Asia, etc?

[Muranov] This question has already been raised by Azerbaijan, Kazakhstan, and other republics of the former Union. It will most likely be resolved in the near future.

[ARMIYA] Various areas of the former USSR have seen an increase in frequency of murders and beatings of military personnel by civilians. Are you in possession of information on bringing the latter to justice?

[Muranov] Civilian procuracies and courts are conducting investigations and examinations of that kind of matter. That is their prerogative. However, I can say that law enforcement agencies of the sovereign states are quite hesitant to become involved in this.

[ARMIYA] How many judicial sentences are appealed every year?

[Muranov] About a third. The overwhelming majority of sentences handed down by military courts are deemed to

be just. I must admit, however, that there are instances in which justice agencies impose unjust sentences. Last year, there were unjustified sentences of eight servicemen set aside by higher military courts.

[ARMIYA] To what extent is the structure of military courts dependent upon the Ministry of Defense?

[Muranov] Military courts are not subordinated to the Ministry of Defense. They are part of the unified judicial system and are tied to the Supreme Court; to the Russian Ministry of Justice, in the organizational aspect of judicial activity. We do maintain contact with Ministry of Defense leadership and local commanders, but on a basis other than one of subordination. In addition, our judges are in fairly frequent contact with commanders of units and subunits in matters concerning crime prevention in field units. For example, every second criminal case is reviewed in the particular unit, with personnel present. In every tenth case, the military authorities are handed either a special attachment or a recommendation for removing from the record certain facts in a case uncovered during the legal process that rendered some influence on commission of the particular crime.

[ARMIYA] In our conversation so far, we have not brought up the subject of problems encountered by military courts and their workers. Such problems must exist.

[Muranov] Absolutely. One need take only the question of social protection for military judges. Our officers are in the same situation as the majority of people wearing the uniform: economically poor conditions, lack of housing, etc. Many military judges are presently working under extreme conditions. This applies especially to those who are carrying out their duties in the Transcaucasus, the Baltics. There have been incidents of armed attack on military courts, with judges taken hostage. There are also problems with cadres. More young officers are now requesting discharge into civilian life. The causes are known: poor living conditions, uncertainty, constant pressure. Difficult though it may be, however, our judicial corps, which I consider to be qualified, organized, and disciplined, is resolving and will continue to resolve their tasks.

[ARMIYA] In conclusion, I would like to ask you about the progress of judicial reform in the Armed Forces and the major goal in this regard.

[Muranov] I would list two major goals of the current reform. First, military personnel must be endowed with the right to judicial protection. Second, we must create an independent, competent military court that could guarantee this right.

I wish to emphasize that the above is already being made a reality. For example, just recently the Plenum of the Russian Federation Supreme Court passed the Decree on Judicial Protection of the Rights of Servicemen Against Illegal Acts Realized by Military Agencies and Military Authorities. The Plenum explained to the

courts that, based on Article 63 of the Constitution of the Russian Federation, every serviceman possesses the right to lodge a legal appeal against acts committed by military agencies and military authorities, if he feels that they have violated his rights and freedom. This kind of complaint will be examined by our military courts and by military judges. In addition, the Plenum discussed the Russian Federation Law on Military Courts, and, employing the right granted it by the Constitution of the Russian Federation, submitted as legislative initiative, to the Supreme Soviet of Russia, a draft bill in this regard.

Also to be expanded in the current reform are other rights of military personnel regarding judicial protection, protection of the individual, and servicemen's legal interests.

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Communications Network Equipment

93UM0502A Moscow *TEKHNICA I VOORUZHENIYE*
in Russian No 1, Jan 93, pp 38-39

[Article by Lt-Col Yu. Yurchenko, Candidate of Technical Sciences: "Packet Radio Networks"]

[Text] As they are reporting in the foreign press, the structure of direct communications systems between troop command posts is being improved continually. In particular, they are continuing to convert existing radio communications systems to digital methods of transmitting information (basically delta-codes with a transmission speed of 16 kilobits/second) and to the packet transmission of speech and data.

Special attention is being paid to the development of packet radio networks as most promising in comparison with traditional communications networks. They are based on the principle of the commutation of packets as applied to a radio communications system with mobile facilities and the collective use of some common radio channel.

Investigations carried out by leading foreign firms have shown that in the project planning of packet radio networks specialists have to make many diverse decisions relative to the architecture of the network as a whole and the design of individual elements of it. The choice of a specific version depends on the external conditions in which the network must work as well as on the demands on the technical specifications, cost, and other limitations. In particular, it is necessary to take into account the influence of the conditions for the propagation of the radio wave on the topology of the network, to develop effective methods for the collective use of the radio channel and optimum algorithms for the choice of routes in it, and to resolve questions in the automated control of the communication lines, the linking of the network with users when they move, and other problems.

The distribution of the channel resource among users is accomplished with the help of an access protocol. They note that in the division of the channel for its collective use it is necessary to provide for the resolution of conflicting situations arising when subscribers want to use it simultaneously. Widespread in practice is the a priori setting of channel resources or dynamic access to it. The essence of the latter is that users are admitted to the transmission cycle on the basis of information about the channel and the intensity of the flow of requests for it.

Protocols free from conflicting situations provide for the access of only one user to a channel at a time. Examples of such protocols are fixed multistation access with a temporal concentration in which time segments are permanently assigned to a station of the packet radio network and multistation access with a frequency concentration of channels.

Foreign specialists link the possibilities for the further improvement of the utilization of a common band of frequencies with the introduction of methods for random access that also provide for the temporal division of the channel among users.

Foreign specialists pay much attention to the problem of the development and selection of a routing algorithm in the network. Its basic task is to select ways through which the packets will be transferred to the recipient. In addition, the routing task includes the development of a solution on whether to accept or reject the received packet or to retransmit it. The selected ways must minimize the average delay of the packet in the given throughput capacity.

In the assessment of foreign experts, the choice of a routing algorithm basically depends on the characteristics of the traffic and the dynamics of the network topology. They think that in relatively static networks most often those methods are effective in which the stations of packet radio communications ascertain their own coherence (possibility of transmitting information to other stations) and then assign relatively permanent routes. In networks with an average degree of mobility, which are characterized by constant change in coherence, a more effective use of the communications channel is achieved by reducing the number of connections established and consequently additional input of resources.

In highly dynamic networks, where network delays make it more difficult to track all changes in coherence in the entire network, most acceptable are wave algorithms and routing that provide for the transmission of the packet to each network station. In so doing, the stations of packet radio communications register the fact of the passage of individual packets through them and make a decision on whether or not they should transmit them further. The primary merit of such algorithms is that they, as a rule, require only small additional expenditures for the equipping of the radio station and make it possible to use the simplest

schemes for the control of the network. In this way, it is expedient to adopt wave algorithms in those networks that require a high reliability of delivery of packets and also in cases where it changes rapidly, where it is difficult to specify the information for routing and to propagate it in the network. In addition, such algorithms are well suited for the transmission of controlling information.

Some networks make extensive use of a routing method based on the use of a central station for the selection of routes. The essence of this method is that each station of packet radio communications sends information on its own local coherence to the central station, where they specify the routes and information necessary for each radio station for the processing and transmission of the packets. Such information is made available to them on request. The use of a central station makes it possible to calculate the optimum routes rather quickly, especially when coherence and overloading are better defined on a global scale and when several radio stations in the network are on mobile facilities rather than being stationary. The basic shortcoming of such a method of determining routes is thought to be the limited possibilities of the central station to allow for rapid local changes in coherence.

To raise the viability of the network, use is frequently made of routing methods based on the distribution of functions. Thus, one of them provides for the provision of the station of packet radio communications with adequate information for the calculation of the best general route in it. In this case, it determines the most suitable station for the directed transmission of the packet. The route is calculated again at the next station and so on. The realization of this method requires that each station of packet radio communications have the possibility of transmitting information on its own local coherence to other stations of the network. They usually employ methods of wave routing for the propagation of such information.

The next group of problems facing the specialists involves the selection of the algorithms for the control of the communication lines and networks. They think that besides ascertaining the fact of the existence of coherence the network control algorithms must provide for methods to control this coherence, for example the possibility of controlling the emitted power and transmission speed.

As the foreign press reports, a station for packet radio communications may include a packet radio communications installation (UPR), a device for the assembly and disassembly of packets, a microcomputer, a display, and other auxiliary equipment. Since the station must operate as a unit of the packet radio network, the main elements of the UPR are a digital control device (programmable processor) controlling the routing and information flows between the stations and a high-frequency receiver-transmitter for the reception and transmission of packets in the communications channel. Besides an

internal device for linkage with the receiver-transmitter, the processor has an external conducting interface for linkage with other systems that may be connected with the packet radio network (for example, a satellite communications network, data banks, terminals, and devices for the control and operation of the network) and also a special external interface for the checking out of programs and their loading directly at the workplace of the UPR.

For the purpose of reducing the influence of interference and for the multiple-beam propagation of the radio wave, the spectrum of utilized signals is widened through the direct modulation of the carrier frequency by pseudorandom sequence under the method of manipulation with minimum displacement. The gain in the processing of the signals under the conditions of the influence of interference is achieved through the use of a matched filter having parameters retunable in accordance with an applicable code and realized utilizing the technology of surface acoustic waves. Coherent recursive integration raises the interference-immunity of the synchronization system, provides for the synchronous detection of the received radio signal, and performs the functions of an adaptive memory of multiple-beam signals. Direct correction of errors is accomplished through packet encoding and successive decoding at several code speeds for two speeds of transmission of information symbols in the packet. The information symbols are modulated through the method of coherent phase manipulation.

The UPR has two operating modes—customary (for the transmission of data) and special. The latter is intended for packetized speech and has a maximum delay of no more than 30 milliseconds in the sending of the packet. The user may request the speech mode of service for each packet, inserting the flag for the speech mode in its heading. After connecting the antenna, he performs just one operation—the turning on and off of the receiver-transmitter with the help of a switch.

According to the reports of the foreign press, radio stations have now been tested and put into operation that make it possible to organize packet radio networks for communication with mobile surface facilities, aircraft, and helicopters. They include a medium-speed packet radio network of the tactical link of command (the speed of transmission of data does not exceed 10 packets a second with a speed of transmission of information of 16 kilobits/second utilizing standard ultrashortwave radio stations; a wide-band network with a transmission speed of 400 kilobits/second; a radio network including low-orbit communications satellites; a packet shortwave radio network used in the navy; and others.

The tests showed that packet radio networks make it possible to serve more users and to transmit more information than an equivalent digital channel of voice communications. Foreign specialists note that they provide for highly reliable transport and datagram services by means of the dynamic determination of optimum

routes and the effective control of the overfilling and equal distribution of the resources of the channel under changing conditions in the lines.

Foreign specialists see possibilities for the further improvement of existing radio communications systems in the development of special equipment for the operation of radio stations—packet inserts (a set of processors linked with the receiver-transmitter). The insert constitutes the digital part of the radio stations and in it they realize protocols controlling the routing and passage of the packets between these stations. They think that the use of packet inserts will significantly raise the flexibility of the network and will provide for an automatic link between the stations of the packet radio communications that are not in a state of direct coherence among themselves.

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Unit Newspaper Closes; New Military Journal Begins

Northern Group of Forces ZNAMYA POBEDY Closes

93UM0559A Moscow KRASNAYA ZVEZDA in Russian
19 May 93 p 3

[Article by Aleksandr Bugay, KRASNAYA ZVEZDA correspondent: "The ZNAMENKA Has Become History"]

[Text] The final issue of the Northern Group of Forces newspaper ZNAMYA POBEDY was published on 15 May.

The newspaper was created on 5 May 1939 in Riga as an organ of the Military Council of the special Baltic Military District. It received its baptism of fire there, in the Baltic region. Both during the years of retreat and during the years of movement westward, the newspaper's frontline correspondents spent a large part of the time at the forward position. The newspaper ended its combat journey as part of the Second Belorussian Front on the banks of the Elbe.

Ilya Erenburg, Lev Nikulin, Sergey Mikhalkov, Stepan Shchipachev, Mikhail Matusovskiy, and many other well-known writers and poets worked on the newspaper at different times.

The newspaper was given its present-day title on 1 July 1945 after formation of the Northern Group of Forces and has been located in the Polish city of Legnice from early 1946 until the last day. It is symbolic that the last issue of ZNAMYA POBEDY was published jointly with GAZETA LEGNICE, a popular weekly of the province.

The 48-year history of the Northern Group of Forces is coming to an end. The last issue of ZNAMENKA is confirmation of our country's resolve, in full accord with

the agreements achieved, to conclude in a timely manner the withdrawal of Russian troops from the territory of Poland.

MOD Monthly ARGUMENT for Personnel, Social Protection Workers Begun

93UM0559B Moscow KRASNAYA ZVEZDA in Russian
19 May 93 p 4

[Advertisement for journal ARGUMENT: "ARGUMENT—A Journal About You and for You, Military Readers!"]

[Text] This publication, the first issue of which will come out in July-August 1993, is addressed primarily to deputy (assistant) commanders for work with personnel, military sociologists, psychologists, lawyers, and workers of Army and Navy culture.

The Ministry of Defense of the Russian Federation is the founder.

The very name of the journal assumes that it will contain authoritative, reasoned articles.

Ways and forms of educating the defenders of the fatherland, demonstrating this process in the language of sociology and psychology, the role and place of military-pedagogical cadres in this process—this is the main theme of ARGUMENT.

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—R240 for three months;

—R80 for one month.

The index number in the catalog of subscription publications is 70314.

It is published once a month.

One can subscribe to the journal ARGUMENT at any post and telegraph office or through unit (ship) subscription organizers.

Read and subscribe to the journal ARGUMENT!

CIS: POLICY

Chief of General Staff Kolesnikov on Progress of Army Reforms

93UM0510A Moscow ROSSIYSKIYE VESTI in Russian
9 Apr 93 p 2

[Interview with Colonel-General Mikhail Petrovich Kolesnikov, Chief of the Russian Armed Forces General Staff, by Ivan Sas, Ministry of Defense Press Center associate; place and date not given: "It Is Beyond Anyone's Power To Stop the Military Reforms"]

[Text] Ivan Sas, an associate of the Ministry of Defense Press Center, interviews, Colonel-General Mikhail Kolesnikov, Chief of the Russian Armed Forces General Staff.

[Sas] Mikhail Petrovich, you took over the General Staff during its formation stage. What is the "Brain of the Army" today?

[Kolesnikov] For the sake of fairness, I will say that the General Staff I took over was already largely renewed. The process of reforming its structures continues and entails significant quantitative and qualitative changes. For example, the staff has been reduced by 35 percent. Only 12 of the 17 directorates remain—some have been abolished, others reoriented in accordance with new tasks or withdrawn from the General Staff. Incidentally, a large number of general positions have been cut; whereas there were 235 of them before, now there are only 173.

The General Staff is tied by thousands and thousands of invisible threads to all the cells of the organism of the armed forces—from the submarine drifting under the ice and the satellite in orbit to, say, the separate battalion performing a peacekeeping mission in Yugoslavia. Two powerful streams of information running in the opposite direction are "anchored" at the General Staff. One, incoming, makes it possible to track the situation minute by minute, and analyze and forecast its development. The other, outgoing, in the form of orders, directives, commands, and so forth, goes to the troops and the fleets, supporting their vital activities and combat readiness. And between these streams stands a person. As a rule, this is a very experienced professional who has gone through a big Army or Navy school, an analyst who has completed one or sometimes two military academies.

I understand that this is a rather simplified outline, but it still provides some kind of a picture...

[Sas] Let us try to superimpose this outline over the real situation today.

[Kolesnikov] Fine. After the breakup of the unified defense space—the Warsaw Treaty Organization and the USSR—Russia set about to create its own armed forces. We urgently had to develop an overall concept of military organizational development. In essence, we had to

determine anew the necessary effective troop combat strength, review the correlation of the branches of the armed forces and combat arms in the search for optimum variants, and restore and reform many disrupted management structures. And at the same time, we had to deal with practical tasks that could not wait, such as supporting the withdrawal of troops from countries near and far, getting them settled, reducing the Army and Navy, participating in peacekeeping actions on territories of the CIS countries and within the framework of the United Nations.

In conditions of the strictest time limits, we had to immediately "fit" old structures to these tasks, while simultaneously reforming them and making cuts. Nevertheless, there are people, unfortunately, including among the military, who are trying to present all this as an ordinary, unchanging scare tactic and accuse the leadership of the Russian Armed Forces of being opposed to the new policy and impeding reforms.

Actually, time is already showing who is right. After the breakup of the Soviet Union and its armed forces, we experienced the most difficult period, full of the most serious dangers. And the General Staff of the Russian Armed Forces not only did not lose control of the troops and naval forces, as some had predicted, but also conducted a tremendous amount—and this is no exaggeration—of organizational work which noticeably stabilized the situation in the Army. And this is not bragging, my personal contribution here was quite modest, but a statement of fact.

In general, I am deeply convinced: to impede military reforms today is just the same as to try to stop drifting ice that has started moving on a big river. This is beyond anyone's power. The reforms have begun, and no one can stop them. But it is too soon to take it easy. Every river has many turns and "bottlenecks." It is as if the ice jams that formed here have not washed away the bridges and dams or caused trouble—and that is what we should be concerned about today.

[Sas] What do see these "bottlenecks" to be?

[Kolesnikov] Unfortunately, there are very many of them. Here is a most graphic example: the situation that has taken shape with manpower acquisition in the armed forces. The way things are going, the army will soon be left without its main character—the soldier. Whereas in 1992 only 29 out of 100 draftees ever donned the uniform (the rest received deferments), today, according to forecasts, only 16 will serve. We will reach a critical point in the fall, when two call-ups will be discharged immediately in connection with the transition to a 1.5-year term of service.

Back last year, we sounded the alarm and were hoping very much that it would be heard in the parliament of Russia, which is precisely the one who was supposed to consider the Russian Federation draft Law on Military Service Obligation and Military Service. But the law has been passed, our proposals rejected. And the Ministry of

Defense, in essence, was left face to face with this most critical problem. The entire drama is that it is unable to solve it independently.

In my opinion, neither the parliament, nor the government, nor the public has yet become aware of all the possible consequences. If everything keeps going like this, we will reap not only an irreversible decrease in combat readiness. The greater the manning shortage in privates and sergeants in units and on ships, the greater the physical and moral loads on personnel, and the greater the chances for accidents, injury, theft of weapons and combat equipment, and such negative phenomena as "dedovshchina" [harassment of conscripts by other conscripts with more seniority] and non-regulations relations. The situation itself will not permit commanders to set things up according to regulations and to create a healthy atmosphere in military collectives.

That is, we are moving toward a line which is dangerous to cross, both for the Army and for society.

[Sas] What is the way out?

[Kolesnikov] I do not think we can get by without taking what are usually called unpopular measures. For example, we need to repeal certain categories of draft deferments and increase accountability for evasion of military service.

[Sas] Russia inherited, for all practical purposes, some debris from the Armed Forces of the former USSR. It got troops of the second strategic echelon and was deprived of part of the forces of the Black Sea Fleet, Baltic Fleet, and Caspian Flotilla. Please tell us, insofar as is permissible, what new groupings are being created on the territory of Russia.

[Kolesnikov] You have touched upon one of the fundamental problems of our military organizational development. We are working in a planned, purposeful manner on solving it now. Whether we like it or not, objective necessity is forcing us to examine the importance in the overall defensive system of the Moscow Military District, which quite recently was in the category of internal districts and, consequently, structured taking this into account. We are withdrawing part of the forces of the Western and Northwestern groups of forces here to reinforce it.

It would seem that we are talking about indisputable, obvious things that are understandable even to a person far removed from military problems. Nevertheless, the mass media cannot restrain itself from the temptation to create another "sensation" out of this: they say, Grachev is "surrounding" Moscow with troops so it simpler to put down public demonstrations. Let this be on their conscience.

But let us continue. The purpose of the Volga and Ural military districts, which were considered secondary, is also changing. The Volga and Ural region is becoming

the base for the Mobile Forces which are being created. This region was chosen in connection with the fact that units of the mobile forces and military transport aviation must be located not in the primary defensive zone, but deep in the country.

A new grouping is also being formed in the North Caucasus Military District. In this and other regions, we still have to solve a large number of problems associated with reception of the Russian troops being withdrawn from the Baltic states, the Transcaucasus, Central Asia, and Moldova.

[Sas] The START-2 Treaty, which affects the holy of holies of Russia's defense capability, its nuclear potential, has evoked the sharpest polemics. Some claim that the treaty, if implemented, will strengthen the security of other countries. Others, on the contrary, with serious analytical calculations argue that the START-2 Treaty is a "mine" which we are voluntarily placing under our strategic triad. Whose side do you support?

[Kolesnikov] Let us reason based on specifics. According to the START-2 Treaty, the parties pledge to reduce by 1 January 2003 the number of nuclear weapons to 3000-3500 or maybe even to a lower level by agreement. This, of course, is a step unprecedented in scale in the history of curbing the arms race by the world community. However, let us record the following fact here: even after such reductions, Russia will continue to possess a nuclear potential that is no less in yield than that of other nuclear powers.

Further, the treaty calls for removing from the arsenals of the sides, destroying, and ceasing production of intercontinental ballistic missiles [ICBM] with multiple independently targetable reentry vehicles. Here is where many people, not understanding, sounded the alarm: Russia, they say, is being deprived of the basis of its nuclear might—land-based nuclear weapons.

First of all, by reducing its ICBM's, Russia is not at all being deprived of the basic component of the strategic triad. Heavy missiles with multiple reentry vehicles will be replaced by other single-warhead systems, which will lead to a significant strengthening of overall strategic stability after both sides fulfill this obligation.

Second, the United States, which has always had an advantage in strategic aviation, under START-2 pledges to limit the number of nuclear weapons on heavy bombers at from 750 to 1250 (for comparison: under START-1 the United States potentially could, through its heavy bombers, increase the actual number of weapons by 2000-2500 over and above the 6000 specified by this treaty). The American side is also making major reductions in sea-launched nuclear weapons—to one-third its existing level and one-half the level planned by the START-1 Treaty. And these are not some obsolete missiles systems that are scheduled to be reduced, but such modern systems as the Trident-2.

If everything is taken in sum total, weighing the positives and the negatives, the conclusion is clear: the START-2 Treaty does not give either side any advantages. It preserves the balance of strategic forces, but at a lower and, consequently, safer level both for Russian and the United States and for all of humanity.

[Sas] A little over two years ago, when the top military leadership reacted quite painfully to the proposal on manning the armed forces on a contract basis, your answer to the question about if such an approach was possible was literally the following: "Of course. But this process, obviously, will be possible only after passage of a package of laws on defense and completion of economic reform." Today, we still do not have many of the laws and economic reform is spinning around, but the decision on a transition to contract service has been made. Was this done hastily?

[Kolesnikov] Yes, some of the laws in the military package are just now being prepared. But to make up for that, as you know, some fundamental legislative acts have already been implemented, such as the law on defense, status of the serviceman, military service obligation and military service, and others. They create the legal and social base for a phased transition to manning the armed forces on a contract basis.

Are we taking a risk by having launched the first, 100,000-man recruitment of those wishing to serve under contract? To a certain degree, yes. The 6 billion rubles (in 1992 prices) allotted to us by the government for this purpose may not be enough at today's dynamics of inflation. We will pose the question of indexation and flexibly maneuver financial assets, observing a policy of strict economy. Moreover, we figure on receiving income from the sale of excess military property during the course of the drawdown.

I want to especially emphasize that the transition to manning the armed forces on a contract basis did not begin spontaneously. We conducted a variety of calculations and research, and worked out forecasts. We predicted many of the problems we are now encountering.

The main one is the shortage of housing. There are about 150,000 officers and warrant officers in the armed forces now without apartments. It is most unfortunate that this number will not decrease in the near future; on the contrary, it will increase. According to our forecasts, in connection with the withdrawal of troops from abroad, by 1995 it will reach a peak of up to 400,000 without apartments. You see, a young man who has decided to serve under contract first asks the question: Will I have housing? For the time being, we are unable to give any firm guarantees.

Everything is very difficult. Any idea, like a seed, germinates and produces fruit only when the soil has been fertilized well and has enough heat, moisture, and light. In this case, the seed has been sown, I would say, in meager, poorly loosened, and warmed ground.

[Sas] It might die?

[Kolesnikov] Why? They get good crops even on rocky soil. If you give it attention and love.

[Sas] Let us assume the day is one hour longer. What would you do with this time?

[Kolesnikov] I doubt whether I would be able to spend this gift of an hour swimming in the pool. It would probably be added to duty time. Such is the situation. All efforts now are aimed at ensuring progress in reorganizing the armed forces and getting closer to the time when we will have stabilization and normal functioning of all army structures.

(The interview will be published in its entirety in the journal *ARMIIA*.)

Implementation of Servicemen's Protection Laws

Presidential Directive on Program To Implement Laws

93UM0486A Moscow *KRASNAYA ZVEZDA* in Russian
9 Apr 93 p 1

[Directive of the President of the Russian Federation]

[Text] For the purpose of increasing social protection of servicemen, persons discharged from military service, and their family members:

1. The Program of Priority State Measures for Increasing Social Protection of Servicemen of the Russian Federation, Persons Discharged from Military Service, and Their Family Members in Conditions of Economic and Military Reform submitted by the Council of Ministers and the Government of the Russian Federation is approved.

2. Financing of measures of this program in 1993 is to be accomplished through allocated budget appropriations, funds from the sale of military property released in connection with the reduction in the personnel strength of the Armed Forces of the Russian Federation, non-budget funds of the troops, and personal funds of servicemen and persons discharged from military service, with attraction of funds of commercial structures.

[Signed] B. Yeltsin, President of the Russian Federation
27 March 1993, No 203-rp

Council of Ministers Official on Executive Measures Taken

93UM0486B Moscow *KRASNAYA ZVEZDA* in Russian
9 Apr 93 p 1

[Interview with Vladimir Petrovich Kvasov, director of the staff of the Russian Federation Council of Ministers, by Vladimir Gavrilenko, *KRASNAYA ZVEZDA* correspondent: "The Cause of Social Protection for Soldiers Requires Consistency and a Planned Approach"]

[Text] In a short time, from September 1992 through February 1993, the Supreme Soviet of the Russian Federation passed a package of laws on questions of defense, military service obligation and military service, and legal and social protection of servicemen. The executive authority also must do much to implement them. And this work is proceeding despite the opposition of the two branches of power and the unstable situation in the country.

Our correspondent met with the director of the staff of the Russian Federation Council of Ministers, Vladimir Kvasov, and asked him to tell us about the process of implementing the "military" laws.

[Gavrilenko] Vladimir Petrovich, publication of each law from the "military" package in our newspaper was accompanied by publication of the decree of the Supreme Soviet of Russia on the procedure of its implementation, where, for example, the following was read: "to bring existing normative acts in line with this law and to ensure its observance." What does this mean for you?

[Kvasov] This means only one thing: to make changes to present documents, repeal earlier normative acts that were in force, and organize work to implement these laws.

[Gavrilenko] Does the staff of the Council of Ministers have special bodies that will engage in drawing up these documents?

[Kvasov] Until recently we did not have these, but last year a section was created to deal with questions of social protection of servicemen. Now the creation of an department for supporting the activities of administrative bodies is in the final stages. It is to deal with economic issues of the Ministry of Defense, Ministry of Internal Affairs, and Ministry of Security and study mobilization matters. It also will organize work on all "military" laws. To be more accurate, it has already begun work...

[Gavrilenko] Then, Vladimir Petrovich, let us, as they say, go over the "military" laws. What has our government done to implement each of them?

[Kvasov] Let us begin with the Russian Federation Law on Defense, passed on 24 September 1992. In accordance with this law, the government of Russia is responsible for the state of the armed forces, oversees the activities of state administration bodies under its jurisdiction on defense questions, and organizes equipping the army with armament and equipment and providing supplies and resources. Implementation of the law began with the government directive of 17 November 1992, which was published in *KRASNAYA ZVEZDA*.

Now let us take the Russian Federation Law on Military Service Obligation. The Supreme Soviet decree on its implementation has three paragraphs—8, 7, and 11—which talk about induction into military service, performance of military service, responsibility of servicemen,

general military regulations, urgent measures to prevent evasion of service, and so forth. Therefore, after the necessary study, which is now being done, the appropriate government directive will also appear. We hope your newspaper will publish it.

The defense complex department, legal department, and conversion department of the staff of the Council of Ministers have been instructed to participate in preparation of this document. But this work is very difficult. I will say frankly that the greatest difficulty in getting this law going is its provision on manpower acquisition for the armed forces, border troops, and internal troops. The considerable reduction in the capabilities for providing personnel replacements for the Army is explained by the expansion of the list of draft deferments contained in the law.

Incidentally, the Ministry of Defense has already submitted a draft of a new statute on performance of military service; after discussion and study, it will be passed to the Supreme Soviet of the Russian Federation.

[Gavrilenko] Certainly, Vladimir Petrovich, implementation of laws defining the social rights and guarantees of servicemen is causing the government just as much difficulty...

[Kvasov] You are absolutely right. As never before, the package of "military" laws has a very powerful theme of social protection of servicemen. Three whole laws. Let us take the Law on Status of Servicemen. The appropriate instructions have already been given. For example, the Ministry of Defense has been instructed to draw up proposals on preferential taxation of military trade enterprises and organizations and also on drawing up a procedure for implementing the right of servicemen to acquire industrial goods and foodstuffs at special prices through military trade. All this will also be included in the new statute on military trade.

Of course, the government coordinates its actions with bodies of state power of subjects of the Russian Federation in forming the budgets of nation-state and administrative-territorial formations. The funds needed by the bodies of local self-government to provide housing to citizens discharged from military service and their families are being put into these budgets. It envisions paying them monetary compensation or allocating funds for construction or acquisition of housing.

[Gavrilenko] A number of provisions of the Russian Federation Law on Status of Servicemen are direct action; they do not require additional documents. But they are the ones with which there were misunderstandings. For example, with introduction of transportation privileges, or a special payment for telephones...

[Kvasov] Well, it is as if everything has been settled with the transportation privileges; individual aspects will be improved. As far as the 50-percent discount in the payment for a telephone is concerned, the Ministry of Communications of the Russian Federation has not yet determined its position. As far as I know, this is

explained by the peculiarities of the financial activities of communications enterprises operating on cost-recovery principles. The Ministry of Communications has requested financing of this measure. The government instructed the Ministry of Finance to look for sources to cover the expenses associated with instituting this benefit. I think this matter will be resolved in the near future.

As far as the law on pensions is concerned, calculation of pensions under the law has begun. The Russian Federation Law on Additional Guarantees and Compensations for Servicemen Performing Military Service on the Territories of the States of the Transcaucasus, the Baltic Region, and the Republic of Tajikistan, and also Performing Missions To Protect the Constitutional Rights of Citizens in Conditions of an Emergency Situation and in Armed Conflicts is also in effect. The government is now studying the question of extending some of these privileges to workers and employees of units of the Russian Army.

Of course, the government will continue this work. Thus, on 27 March Russian Federation President B. Yeltsin approved a program of priority state measures to increase social protection of servicemen, persons discharged from military service, and their family members in conditions of economic and military reforms.

Fulfillment of this program will make it possible to increase considerably the degree of social protection for people in uniform.

Program of Priority Measures for Servicemen and Families

93UM0486C Moscow KRASNAYA ZVEZDA in Russian
9 Apr 93 pp 2-3

[Program of Priority Measures To Increase Social Protection of Servicemen of the Russian Federation, Persons Discharged from Military Service, and Their Family Members in Conditions of Economic and Military Reforms (Approved by Directive of the President of the Russian Federation of 27 March 1993, No 203-rp, Moscow, 1993)]

[Text] Those covered by the program are: servicemen of the Armed Forces of the Russian Federation, the Ministry of Security of Russia, including the Border Troops, the Ministry of Internal Affairs of Russia, including the Internal Troops, the State Committee for Emergency Situations of Russia [GKChS], the SVR [Foreign Intelligence Service] of Russia, the FAPSI [Federal Government Communications and Information Agency], the Federal Railway Administration of the Russian Federation, the Federal Administration of Special Construction of the Russian Federation, the Main Military Maintenance and Restoration Administration of the Ministry of Communications of Russia, and other ministries and departments having military elements in their composition; persons discharged from military service; and their family members.

| Measure | Executor | Term of Performance |
|---|--|---|
| Legal and Social Protection of Servicemen, Persons Discharged from Military Service, and Their Family Members | | |
| Draw up and submit to the Council of Ministers—government of the Russian Federation proposals on measures ensuring material and organizational-technical conditions for implementing the following basic legislative and normative acts: | | within 3 months after passage of each legislative and normative act |
| Law on Military Service Obligation and Military Service | Min. of Defense, Min. of Economics, Min. of Justice, Min. of Finance, | II Qtr 1993 |
| Law on Status of Servicemen | Min. Defense, Min. of Internal Affairs [MVD], Min. of Security, other ministries and departments having military elements in their composition, Min. of Economics, Min. of Finance, Min. of Labor and Employment, Social Protection Fund [FSZ] of Russia | 1993 |
| Law on Servicemen's Pensions | Min. of Defense, Min. of Finance, Min. of Economics, MVD, Min. of Security | II Qtr 1993 |
| Law on Military Courts | Min. of Justice, Min. of Defense, MVD, Min. of Security | 1993 |
| Law on Judicial Appeal by Servicemen Against Illegal Actions of Officials | Min. of Justice, Procurator-General's Office of the Russian Federation, Min. of Defense | 1993 |
| On Criminal Liability for Military Crimes (section of the Criminal Code of the Russian Federation on "Military Crimes") | Min. of Justice, Procurator-General's Office of the Russian Federation, Min. of Defense | III Qtr 1993 |
| Law on Fundamentals of Social Policy with Respect to Veterans in the Russian Federation | Min. of Defense, MVD, Min. of Security, other ministries and departments having military elements in their composition, Min. of Finance, Min. of Economics | 1993 |
| Law on Alternative Service | Min. of Defense, Min. of Justice, Min. of Economics, Min. of Labor and Employment, Min. of Social Protection of the Population, FSZ of Russia | 1993 |
| Statute on Procedure for Performance of Military Service by Citizens of Russia | Min. of Defense, MVD, Ministry of Security, other ministries and departments having military elements in their composition | 1993 |
| General Military Regulations of the Armed Forces of the Russian Federation (permanent) | Min. of Defense | 1993 |
| Statute on Comrades' Courts of Honor in the Armed Forces of the Russian Federation | Min. of Defense, Min. of Justice | 1993 |
| Complete drawing up and submission to the Council of Ministers—government of the Russian Federation the following drafts: | | |
| Statute on State Compulsory Insurance of Servicemen and Military Reservists | Min. of Defense, MVD, Min. of Security, Min. of Finance, Min. of Economics, Min. of Social Protection of the Population | 1993 |
| Statute on Procedure and Norms of Providing Servicemen All Types of Allowances During Peacetime and Wartime (food, clothing and related gear, medical support, transportation, postal service, personal goods and services) | Min. Defense, MVD, Min. of Security, other ministries and departments having military elements in their composition, Min. of Economics, Min. of Health | 1993-1994 |
| Statute on Compensation and Guarantees of Legal and Social Protection of Servicemen Injured as a Result of Accidents, Exercises, Tests, and Other Work with Nuclear Plants, and also by Any Types of Weapons of Mass Destruction and on the Procedure for Performance of Duty on Territories Subjected to Contamination by Radioactive, Toxic, and Bacteriological Substances | Min. of Defense, MVD, Min. of Security, Min. of Finance, Min. of Economics, GKChS, Min. of Health, Min. of Social Protection of the Population | 1993 |
| Drawing up (after conclusion of interstate agreements on status of Russian troops in countries where they are temporarily stationed) a draft decree of the Council of Ministers—government of the Russian Federation on problems of troops of the Russian Federation located on the territory of the former USSR, which provides for the following: | | 1993-1994 |

| Measure | Executor | Term of Performance |
|--|---|---------------------|
| determining the procedure for advance placement of officers, warrant officers, and extended-service personnel who will be discharged from military service on housing lists in Russia prior to their departure from the territory of CIS member-states and other republics of the former USSR | Min. of Defense, Min. of Economics | |
| resolving the issue of monetary compensation for servicemen and their family members for paid medical services and receipt of secondary and higher education in the countries in which they are stationed | Min. of Defense, Min. of Finance, Min. of Economics, Min. of Health, Min. of Education, Min. of Science, Higher Education and Technology Policy | |
| resolving the issue of monetary compensation for municipal services, electricity and telephone, and also for travel on public transport of urban, suburban, and local service (other than taxis) | Min. of Defense, Min. of Economics, Min. of Finance | |
| Drawing up proposals on concluding intergovernmental agreements with countries where Russian troops are stationed on legal and social guarantees for citizens of Russia residing outside the Russian Federation—pensioners of the Ministry of Defense of Russia and other ministries having military elements in their composition. After conclusion of the agreements, preparation of the necessary normative acts and governmental decisions to carry out the measures being implemented by the Russian Federation | Min. of Defense, Min. of Security, MVD, Min. of Economics, Min. of Foreign Affairs, Min. of Finance, State Committee for Management of State Property | 1993-1994 |
| When drawing up normative acts on questions of social protection of refugees and forced immigrants, ensure resolution of specific problems of family members of servicemen forcibly evacuated from garrisons located in areas of military conflicts | FMS [Federal Migration Service], Min. of Defense, MVD, Min. of Health, FSZ | 1993-1994 |
| Timely submission of the following draft decrees to the Council of Ministers—government of the Russian Federation as economic situation in the country and cost of living index, and the wages increase in the production sphere: | Min. of Defense, Min. of Security, MVD, other ministries and departments having military elements in their composition, Min. of Economics, Min. of Finance, and Min. of Social Protection of the Population | 1993-1995 |
| on increasing pay and allowances of all categories of servicemen and pensions of persons discharged from military service | | 1993-1995 |
| on increasing wage rates and salaries of civilian personnel of military departments to the level of corresponding specialists of the budget sphere of civilian ministries and departments | | 1993-1995 |
| on increasing the amount of extra allowances paid to servicemen in the form of fixed amounts, including for performing missions in hazardous conditions | | 1993-1995 |
| on increasing monetary compensation to servicemen and persons discharged from military service without housing and placed on a preferential waiting list for renting living quarters | | 1993-1995 |
| on a mechanism for indexation of pay of all categories of servicemen | | 1993-1995 |
| Studying the issue and submitting to the Council of Ministers—government of the Russian Federation proposals on including on the list of cities and villages of the Far North and equivalent areas for which priority supply of foodstuffs is envisioned for military garrisons located in these areas | Min. of Defense, MVD, Min. of Security, Committee for the Social and Economic Development of the North, Committee for Trade | II Qtr 1993 |
| Submitting to the Council of Ministers—government of the Russian Federation proposals for increasing the legal and social protection of servicemen of the Internal Troops and workers of institutions and bodies of internal affairs supporting the functioning of the corrective-labor system | MVD, Min. of Justice, Min. of Finance, Min. of Economics | III Qtr 1993 |

| Measure | Executor | Term of Performance |
|--|--|---------------------|
| To increase safety of operating armament and military equipment, draw up and submit to the Council of Ministers—government of the Russian Federation coordinated proposals for improving the system of orders and procurement of arms and also for creating a state system of testing and evaluation of the characteristics of military equipment independent of the manufacturers | Min. of Defense, Min. of Economics | II Qtr 1993 |
| Draw up and, if necessary, submit to the Council of Ministers—government of the Russian Federation proposals for improving the system of measures and bodies ensuring the safety of servicemen in the process of combat and special training, taking into account the specifics of the branches of the armed forces of the Russian Federation, the MVD Internal Troops, the Border Troops of the Ministry of Security of Russia, and other military formations | Min. of Defense, other ministries and departments having military elements in their composition | 1993-1994 |
| To prevent the death and injury of compulsory-service personnel and get rid of relations that are at variance with regulations, study and submit proposals for speeding up the establishment of a contract system of manpower acquisition, taking into account the state's economic capabilities, and for bringing the size of the call-up of citizens for military service in line with the real demographic capabilities of the state | Min. of Defense, other ministries and departments having military elements in their composition, Min. of Economics, Min. of Finance, Min. of Education | 1993-1994 |
| Submit to the Council of Ministers—government of the Russian Federation proposals for creating a public-state fund for social support of servicemen who become victims of crime while performing military service | Min. of Defense, other ministries and departments having military elements in their composition, Min. of Justice, Min. of Finance, Min. of Economics | II Qtr 1993 |
| Submit for approval the draft Edict of the President of the Russian Federation on a Lump-Sum Grant to Parents, Widows (Widowers), Children, and Dependents of Servicemen (Military Construction Workers) and Military Reservists Who Are Killed (Die) or Missing During the Performance of Military Service in Peacetime | Min. of Defense, Min. of Finance, Min. of Economics | II Qtr 1993 |
| Providing Housing and Daily Support | | |
| Finalize and submit to the Council of Ministers—government of the Russian Federation a state program for providing housing to servicemen and persons discharged from military service | Min. of Defense, other ministries and departments having military elements in their composition, Min. of Economics, Min. of Finance, local bodies of executive power | 1993 |
| In connection with the predicted increase in the number of servicemen being discharged from military service without being granted housing, prepare and submit to the Council of Ministers—government of the Russian Federation proposals on improving the existing system of providing them living space, having in mind: | | |
| drawing up and introducing procedures for determining in advance the necessary amounts of housing construction in the regions, taking into account the desires of servicemen being discharged | Min. of Defense, MVD, Min. of Security, Min. of Economics, State Committee for Statistics | 1993-1994 |
| drawing up and submitting to the Council of Ministers—government of the Russian Federation proposals on creating a system of distributing by areas and departments budget and nonbudget appropriations for housing construction for discharged servicemen and monitoring the effectiveness of their use | Min. of Defense, Min. of Economics, Min. of Finance, Interdepartmental Commission on Social Issues of Servicemen and Their Family Members | III Qtr 1993 |
| Submit to the Council of Ministers—government of the Russian Federation proposals on changing the existing procedure for providing financial assistance in individual housing construction to officers, warrant officers, and also persons discharged from military service and having this right in accordance with the Russian Federation Law on Status of Servicemen | Min. of Defense, Min. of Finance, Min. of Economics | III Qtr 1993 |

| Measure | Executor | Term of Performance |
|---|--|---------------------|
| Determine the procedure for guaranteed allocation of land plots for individual housing construction to servicemen and persons discharged from military service and having the right to this in accordance with the Russian Federation Law on Status of Servicemen | Min. of Defense, Committee for Land Reform | III Qtr 1993 |
| Submit to the Council of Ministers—government of the Russian Federation proposals obligating bodies of executive power to ensure the unhampered export of construction materials and structures from a region for construction of housing for servicemen and for accommodating troops being withdrawn to the territory of Russia | Min. of Defense, MVD, executive bodies of power of republics as part of the Russian Federation, krais, oblasts, autonomous formations, and cities | III Qtr 1993 |
| To further improve medical support and sanatorium-health resort treatment for servicemen and their family members, submit proposals for improving the material and technical base of military hospitals, polyclinics, sanatoria, rest homes, tourist bases, and child preschool institutions, taking into account the considerable increase (by 1.5 million) of the contingent of people authorized medical support under the auspices of military departments in connection with passage of the Law on Status of Servicemen, the decline (up to 40 percent) in connection with the collapse of the USSR in providing servicemen and their family members sanatorium-health resort treatment, organized rest, and the resulting need to build additional sanatoria and rest homes | Min. of Defense, Min. of Economics, Min. of Health, Min. of Finance | 1993 |
| For guaranteed and comprehensive medical support of servicemen, persons discharged from military service, and their family members, having the right to this, annually allocate appropriations, including currency, for acquisition of medical stores | Min. of Defense, Min. of Security, MVD, other ministries and departments having military elements in their composition, Min. of Finance, and Min. of Economics | 1993-1995 |
| Draw up regional programs for accommodating troops being withdrawn from countries of Central Europe and republics of the former USSR | Min. of Defense, administrations of oblasts and krais, State Committee for Issues of Construction and Architecture, FSZ | 1993-1995 |
| Submit proposals for providing industrial goods and foodstuffs under state order for servicemen in closed and remote garrisons and also Russian troops located in foreign countries | Min. of Defense, Min. of Security, MVD, Min. of Economics, Committee for Trade | 1993 |
| Draw up and submit to the Council of Ministers—government of the Russian Federation proposals on additional measures for providing assistance to specialized voucher investment funds created in the interests of ensuring state support for servicemen in the sphere of privatization | Min. of Defense, State Committee for Management of State Property, Interdepartmental Commission on Social Issues of Servicemen and Their Family Members | II Qtr 1993 |

Social Adaptation (Retraining and Job Placement) of Officers and Warrant Officers Being Discharged from Military Service and Their Family Members

| | | |
|---|---|--------------|
| Organize work to forecast the numerical strength and regional distribution over the territory of Russia of servicemen and their family members to be discharged in 1993-1995 in a planned manner in connection with the reduction of the Armed Forces of the Russian Federation and the withdrawal of Russian troops from foreign countries | Min. of Defense, Min. of Labor and Employment, FSZ, State Committee for Statistics, Coordination Council for Problems of Retraining Officers Being Discharged into the Reserve | 1993 |
| Submit to the Council of Ministers—government of the Russian Federation proposals on organizing vocational guidance work and psychological adaptation of servicemen being discharged into the reserve and their family members | Min. of Defense, Min. of Labor and Employment, FSZ, Min. of Science, Higher Education and Technology Policy, Coordination Council for Problems of Retraining Officers Being Discharged into the Reserve | III Qtr 1993 |
| Determine according to the requirements of the labor market a list of specialties for retraining servicemen and persons discharged from military servicemen, taking into account effective use of their vocational skills | Min. of Labor and Employment, FSZ, Min. of Defense | III Qtr 1993 |

| Measure | Executor | Term of Performance |
|---|---|---------------------|
| Prepare and submit to the Council of Ministers—government of the Russian Federation proposals on retraining officers and warrant officers discharged from military service using funds of the State Fund for Employment of the Population of the Russian Federation | FSZ, Min. of Labor and Employment, Min. of Finance, Coordination Council for Problems of Retraining Officers Being Discharged into the Reserve, Min. of Science, Higher Education and Technology Policy, Min. of Education, Min. of Defense | IV Qtr 1993 |
| Submit to the Council of Ministers—government of the Russian Federation proposals on creating in the system of the FSZ of Russia structures on questions of retraining and job placement of servicemen, persons discharged from military service, and their family members | FSZ, Min. of Science, Higher Education and Technology Policy, Min. of Labor and Employment, Min. of Defense | III Qtr 1993 |
| Determine and submit to the Council of Ministers—government of the Russian Federation proposals on creating in the Armed Forces of the Russian Federation a system of retraining of servicemen subject to discharge from military service | Min. of Labor and Employment, Min. of Science, Higher Education and Technology Policy, FSZ, Min. of Defense | II Qtr 1993 |
| Submit to the Council of Ministers—government of the Russian Federation proposals on creating, on the base of civilian and military educational institutions, centers (courses) for retraining servicemen, persons discharged from military service, and their family members, with payment of stipends during the period of instruction on terms and in amounts specified by legislation in force | Committee for Institutions of Higher Learning, Min. of Science, Higher Education and Technology Policy, Min. of Education, Min. of Defense, Min. of Labor and Employment, FSZ, Coordination Council for Problems of Retraining Officers Being Discharged into the Reserve | III Qtr 1993 |
| Approve statutes and regulations and determine the status of training centers for retraining officers and warrant officers being discharged into the reserve. Prepare and implement vocational skill requirements for these training centers | Min. of Labor and Employment, Min. of Education, Min. of Defense, Coordination Council for Problems of Retraining Officers Being Discharged into the Reserve | 1993 |
| Submit to the Council of Ministers—government of the Russian Federation proposals on organizing training at civilian educational institutions for officers discharged from the Armed Forces of the Russian Federation and having a higher education for engineering-technical, economic, and producing specialties without taking them away from production. Determine quotas for discharged officers in the overall plan of admission to higher educational institutions | Min. of Science, Higher Education and Technology Policy, Min. of Defense, Min. of Education | 1993 |

More Use of Training Simulators To Reduce Training Costs Backed

93UM0510B Moscow KRASNAYA ZVEZDA in Russian
15 Apr 93 p 1

[Article by Vladimir Matyash: "We Must Not Economize on Combat Training, But We Can and Must Make It More Economical"]

[Text] People have recently begun using the concept of "pros" with respect to our armed forces. That is precisely what they are calling volunteers today who have concluded a contract for military service. No matter what you call the conscript private of the past, especially the student or pupil—the essence does not change: they had to be trained to become real professionals. The question, at what price, is very important for the state.

Military skills cost quite a bit in the past, too. But they did not spare fuel, or ammunition, or money to do this (recall the large-scale exercises and maneuvers). Now the situation has changed radically: there is not enough money for improving training facilities, the Army is experiencing an acute fuel shortage... Two-thirds of the

first-class training grounds remained on territories of sovereign states, and many of them left under the Ministry of Defense of Russia are being methodically retaken by local authorities. It is understandable: land is dear, but is not the security of the state really more so?

The task is to train the troops best at the least cost has always been timely for any army. In Western Europe, for example, where there are no large vacant areas for training grounds and where they value environmental cleanliness, they long ago came to the conclusion: mastering weapons and combat equipment, improving the skills of military personnel with the use of modern training equipment is no less effective than on the actual equipment, and it is many times cheaper. The Americans have the same approach. Let us say that one round from a Leopard-2 or an M-1 Abrams tank costs \$1200-2000. One hour of running one of these vehicles costs \$2000. About 60 artillery rounds, 500 12.7-mm shells, and another 2000 rifle rounds are allocated each year for training a tank crew in the United States. The cost of the most modern simulator is approximately \$1 million. Figure out which costs more. The savings is such that

Germany and Great Britain are using the savings to lease a training ground for conducting exercises in Canada.

Effectiveness? In competition for the "Canadian Army Prize," crews from Germany and the Netherlands hit 31-32 of the 32 cannon targets and 80 out of 80 machinegun targets. The training sessions on simulators are having an effect. In the NATO armies, as a rule, every platoon has such a simulator.

And what do we have? We also have simulators. Not per platoon, of course, per battalion. And not for every one. Moreover, they are physically and morally obsolete. And they are designed basically for learning combat equipment of the second postwar generation. That same equipment that is being melted down and cut up today. We are training on combat vehicles with ammunition. Such activities are not simply expensive, they are ruinous.

For the sake of fairness, it must be said that back in 1989, experts of the Main Combat Training Directorate of the Ground Troops developed, substantiated, and proposed a new concept for improving combat training of troops and its bodies during the military reform. In particular, it provided that 80 percent of the training of specialists and instruction of troops would be conducted using simulators. Combat equipment was to be used only in the final phase. It was planned to develop and begin production of the latest standardized simulator complexes for mastering the T-80U and T-72B main battle tanks. The experimental design work was completed and field testing of prototypes of the simulators was successfully conducted already in 1991. Given the names "Konotop" and "Geofil," they were every bit as good as the foreign models in characteristics and technical capabilities. They made it possible, without expending ammunition, fuel, and vehicle resources, to train gunners and commanders. Virtually all training and live firing exercises with all types of ammunition and also a guided projectile can be performed on the "Konotop" and "Geofil." One "shot" on the simulator is 100 times cheaper than a real one.

However, we have to have the simulators themselves before we can begin saving money. The cost of one such unit, which, incidentally, replaces three combat vehicles, is less than one-third the price of one tank. Expensive? Experts calculate that the cost of purchasing a simulator are fully recovered in only six months of operating it. The troops desperately need the "Geofil" and "Konotop." But from all appearances, they will have to wait for some time. About 50 million rubles are required to complete development, finishing, and begin series production of these simulators. Alas, there is no money for this, like there is no approved military budget so far.

Through extensive introduction of the latest simulators we could "reduce the price" of training not only of crews for tanks and infantry fighting vehicles, but also motorized riflemen. The primitive and minimally effective KYa-83 instrument still remains the basic means of

training them. That is why the primary emphasis is placed on practice firing. At the same time, specialists at the "Voskhod" NKTB [expansion uncertain, possibly—'scientific design-technical bureau'] on a competitive basis developed and in 1992 manufactured a mockup of an optical electronic simulator for gunnery training, the "Ingibitor", which has no analogue to this day. Completely re-creating the effect of real fire on the battlefield, it will enable trainees to achieve skills in firing pistols, assault rifles, machineguns, sniper rifles, handheld anti-tank and automatic grenade launchers without expending ammunition. Each such round is more than 10 times cheaper than real ammunition.

Unfortunately, the fate of the "Ingibitor", like the "Konotop" and "Geofil," has never not been fully determined. Financing for its finishing and series production was not provided for in 1993.

On the one hand, there is not enough money to purchase and develop modern training equipment. On the other hand, the possibility of redirecting to a priority direction the appropriations already allocated is made difficult. For example, the Ground Forces saved part of the funds allocated for combat training in 1992, but they cannot use 550,000 rubles of it to complete experimental design work for creating that same "Ingibitor"—it was not specified. Funds for this also were not allocated for 1993 by the Main Missile and Artillery Directorate of the Russian Federation Ministry of Defense, which is in charge of financing scientific research work. A huge number of papers were written to request permission, but the work is at a standstill.

The troops are completing the winter training period. Like the preceding period, it passed in conditions of a shortage of personnel, fuel, materials... I think these problems need to be resolved comprehensively. The time has come to create in each service of the armed forces a coordinating center which would professionally and soundly determine the troops' needs for training equipment and would be responsible for the timeliness and quality of developing training equipment and its delivery. The professionalism of Russian officers and soldiers largely depends on this. It is under such a principle that the armed forces are manned.

Col-Gen Burlakov Denies Corruption in Western Group of Forces

*93UM0510C Moscow KRSNAYA ZVEZDA in Russian
15 Apr 93 p 2*

[Interview with Colonel-General Matvey Prokopyevich Burlakov, Commander-in-Chief of the Western Group of Forces, by KRSNAYA ZVEZDA correspondents; place and date not given: "Do Not Prevent Us From Doing Our Job"]

[Text] Over an interval of several days, articles appeared in a number of publications which touched upon the Western Group of Forces. In this regard, correspondents

of KRASNAYA ZVEZDA consulted Colonel-General Matvey Burlakov, Commander-in-Chief of the Western Group of Forces.

[Burlakov] In my view, they are trying more and more persistently to draw the Army into the April political maelstrom. The Army, it would seem, has clearly defined its neutrality. They are once again making the Western Group of Forces the object of political intrigues. Formally, it is about problems of fighting corruption, in which, as Mr. Boldyrev claims, he is a victim. Actually, the goal is clear, in my opinion: the political opposition, before the very eyes of the people, is trying to blame the executive power for the poor management not only of the economy but also the Armed Forces.

A memorandum to the President of Russia on the results on the work of a group of inspectors of an inspection group was used as accusatory material. The group worked for two weeks in October of last year, and all the conditions for an objective conclusion were created for it, I assure you. This included providing absolutely all the materials for disclosure by the command authorities and the military procurator's office of the Western Group of Forces of cases of law violations. They comprised the factual basis of the memorandum, but not its spirit. And this is the most interesting part. Here is the essence.

The inspection commission headed by V. Vasyagin (and before it, inspectors of the highest rank from the Rear Services of the Armed Forces, Ministry of Defense, Supreme Soviet, and Procurator General's Office worked here) arrived at the Group of Forces obviously thrilled by the rumors and falsehoods that the Western Group of Forces [WGF] had supposedly become mired in blatant corruption and abuses. These rumors, I am now absolutely convinced, arose in a situation when we were forced to break contracts with some firms and conclude them with others, of course, to save money. Those firms, who are backed by influential people in Berlin, Bonn, and even Moscow, were offended as a result. They were the ones who raised the first wave of rumors, which are still making the rounds today.

[Correspondent] As far as we know, the inspection commission was returning to Moscow sort of generally satisfied by the state of affairs in the group. Many officers present at the debriefing said this. What is this complete transformation that occurred?

[Burlakov] That is what I say is the most interesting thing. Listen to what Vasyagin said at debrief in front of the leadership of the WGF, I have it recorded here: "After another series of negative articles in the Western press, we arrived with quite specific intentions... However, after working here, we are leaving with good feelings and one good opinion about the leadership of the WGF." It seemed that everything was clear. But that's just the point, a memorandum altogether different in spirit, appropriately "reworded," lay on the desk of the Russian president.

[Correspondent] It is a voluminous document. Of what specifically do they accuse the Western Group of Forces?

[Burlakov] They accuse us, above all, of violating financial discipline in selling freed-up military property and commercial activities. Although, as you are aware, selling is a sphere of activity of the Ministry of Foreign Economic Relations, and commerce is a area of responsibility of trade organizations directly subordinate to Moscow.

Here, as an example, is one of the accusations: the WGF, they say, for the time of the inspection, transferred to the Germans 393 military installations valued at 3.5 billion marks, but without receiving a single pfennig for this. Who can make such an accusation? A person who does not know or makes it appear that he does not know about the mechanism of solving problems of such a level. Our task is to prepare the real estate for transfer to the German authorities. And we performed it and are performing it as we should. Otherwise they simply would not have accepted these 393 installations from us. Anyone who thinks differently simply does not know the Germans. And sale on a market basis here was the job of government levels of authority, of course, before H. Kohl and B. Yeltsin reached a political solution to this entire problem during the Moscow summit.

[Correspondent] Matvey Prokopyevich, as far as we know, you have never tried to present the group as a Garden of Eden of law and order...

[Burlakov] What do you want, after all, we are a part of Russia, and have the same Russian people serving. There were crimes and, I am afraid, they will continue to take place in today's situation that is difficult in all respects. We are fighting this as best we can.

[Correspondent] You mentioned the economy as one of the basic principles in activities to support the troops. Is this a goal in itself or a forced measure?

[Burlakov] Yes, we economize on everything our whole life. And here the main reference point was and remains low prices. We purchase what is cheaper. We buy potatoes in bulk, and not in plastic bags. We look for amenable suppliers. And we find them. Whereas in 1991 we purchased beef for 2,565 marks per tonne, now we pay 2,029. Whereas in 1991 solid fuel cost us 172 marks, in 1993 it cost 130. We have saved on transportation. The year before last, if you remember, Poland jacked up prices for transportation of our troop trains. We were able to reorient cargo flow to sea ports and got out of the situation. The result was that our partners were forced to reduce their rates 41 percent.

We are saving by reducing staffs. People are doing the work of three. But the 5,000 vacancies have saved more than 58 million marks.

All of these things were done because we did not receive enough funds from the state budget. Did you know that

in the last two years the group was given more than 400 million marks less than it was supposed to be given?

I state with all responsibility that we do not and did not have the blatant corruption about which Boldyrev and company decided to begin talking about for all to hear on the eve of the referendum. An ailing organism could not have carried out a task the scale of which even our "judges" have never dreamt of: of the more than two-million-strong grouping, more than 370,000 people, more than 80,000 pieces of combat equipment, and 1.7 million tonnes of materiel have been withdrawn to date.

[Correspondent] An investigating group from the Procurator General's Office of Russia have been working in the Western Group of Forces for a year now. With so many serious accusations, it would seem that someone would have already been put behind bars...

[Burlakov] Yes, in any event criminal charges would have been instituted against them. No, no one was dismissed or convicted. Maybe this group does not have enough powers? Thus, three months ago I sent an official letter to V. Stepankov himself—we need to close the books once and for all on this badly smelling story. So far, I have not received an answer. Well, in the presence of all the people I invite the highest judicial commission to the WGF.

I do this in hopes that the result of its work will be objective information and not calls for sanctions consistent in the accusatory style of Vyshinskiy. I appeal to common human decency. Finally, I appeal: do not prevent us from doing our job!

Foreign, Defense Ministries Ponder Peacekeeping Role

934D0012B Moscow KOMMERSANT-DAILY in Russian
7 May 93 p 10

[Article by Vladimir Savvin: "For the Use of the Military Abroad, a Legal Base Is Necessary"]

[Text] In Moscow, in the Defense Ministry building on Arbat Square, a joint session was held yesterday of the boards of the Ministry of Defense and the Ministry of Foreign Affairs. A topic of discussion at the meeting of military men and diplomats were questions of the participation of Russia in peacekeeping operations within the framework of the CIS, the United Nations, and the CSCE.

Moscow has earmarked its military contingents for use within the structure of international peacekeeping forces over the course of 20 years. Today, in peacemaking activity under the aegis of the United Nations, five groups of Russian military observers, with a total number of 140 persons, have been activated. Starting in April 1992, a Russian special battalion of 900 persons has joined the multinational forces on the territory of Yugoslavia for the first time. In addition, over the last year subdivisions of the Russian Army have regularly been brought in for the

accomplishment of specific tasks concerning the separation of opposing sides and the regulation of conflicts in Moldova, South Ossetia, Abkhazia, and Tajikistan.

In the words of Russian Defense Minister Pavel Grachev, who opened the session, further use of subdivisions of the Russian Army for these purposes must be underpinned by a clear legal basis as soon as possible. Also necessary is a reliable mechanism for the making of decisions and for the determination of responsibility for their accomplishment. At this point, the absence of these elements compels commanders to make independent decisions and to take upon themselves all responsibility for the actions of the subdivisions entrusted to them. In turn, Russian Minister of Foreign Affairs Andrei Kozyrev noted that the peacemaking contingents should not remain unarmed and "surrender themselves to the mercy of the forces of banditry." In Kozyrev's opinion, workers in the contingent should be able to give a suitable rebuff to those who encroach upon their security. The Ministry of Foreign Affairs and the Ministry of Defense agreed to accelerate the drawing up of a document on a unified approach to the problem of participation of Russian troops in peacemaking operations.

CIS: AIR, AIR DEFENSE FORCES

Air Force First Deputy CINC Kot on New Pilot Training

93UM0482B Moscow KRASNAYA ZVEZDA in Russian
18 Mar 93 p 2

[Interview with Lieutenant-General Viktor Sevastyanovich Kot, first deputy commander in chief of the Russian Air Force, by Colonel Gennadiy Lisyaniykov, press service of the Russian Federation Air Force: "We Train the Pilot—We Educate the Person"]

[Text] Aces are not born; they develop. Defenders of the skies of the fatherland master the first rung on the ladder of skills within the walls of educational institutions of the Air Force, which today are experiencing a new period in their development. We talked about this with Lieutenant-General Viktor Sevastyanovich Kot, first deputy commander in chief of the Russian Air Force.

[Lisyaniykov] Viktor Sevastyanovich, a higher military aviation school in the former USSR found world fame. What is the situation today? What is the leadership of the Russian Air Force doing to supply units and subunits with those specialists who were trained in the former Union republics?

[Kot] The history of development of Russia's aviation schools begins with the Sevastopol Officer School, organized on 21 November 1910. Later on, it was transformed into the Kacha Military Aviation School for Pilots. By 1991 there were 28 educational institutions in the Air Force, including two academies, seven higher engineering schools, 10 pilot schools, two navigator schools, and five secondary aviation-technical schools.

Today, eight aviation schools located on the territory of former Union republics have left this system. We lost 60 percent of the engineering schools—the Kiev, two Kharkov, and the Riga schools; 30 percent of the pilot schools—the Kharkov and Chernygov higher military aviation schools for pilots and the Luga Higher Military Aviation School for Navigators, and also the Bagerovo Center for Training Tactical Control Officers of the Air Force and the Vasilkov Military Aviation Technical School. We have lost military educational institutions with modern training facilities and remarkable teaching collectives. The leadership of the armed forces was presented with one of the paramount tasks, the problem of restoring the disrupted system of training aviators, which coincided with the process of reforming Russia's military educational institutions [VUZes].

We took immediate steps to reorganize and reorient the remaining aviation VUZes. The changes have affected virtually all Air Force schools. In particular, new faculties for training officers in missing specialties have been opened at the Tambov and Irkutsk higher military aviation engineering schools. The Yeysk Higher Military Aviation School for Pilots was partially reoriented to training tactical control officers, and the Chelyabinsk Higher Military Aviation School for Navigators began training navigators for military transport and antisubmarine aviation. The Kurgan Higher Military Political Aviation School became an aviation technical school.

Now, the Air Force VUZes of Russia are able, as before, to train all the necessary aviation specialties. Now we are faced with a different task—to improve and bring all elements of this system to the level of the best world standards.

[Lisyanikov] At the past armed-forces conference of supervisory personnel of Russia's military educational institutions, they talked about reform of military education. It was emphasized that the most significant reorganization will take place in the Air Force VUZes. Tell us about this in more detail.

[Kot] The previous conference was held more than 10 years ago. Quite a number of problems have accumulated during these years. It was noted that four-year higher command schools are the weakest link in the system of military education. In the Air Force these are the schools for pilots and navigators. The conclusion has been made that the content and quality of instruction at them does not fully meet today's requirements.

The decision has already been made to convert all schools for pilots to a five-year term of instruction. Three and a half years are to be devoted to theoretical training. This makes it possible to give it the necessary foundation and ensure the schools enter the new multilevel structure of higher education. The officer candidates will spend one and a half years on just flight training in one type of aircraft, which will provide a great gain in quality. We

figure that the graduates will have experience in flying in virtually all conditions, which we were not able to achieve before.

[Lisyanikov] What has changed in the training of officer candidates with the transition to a five-year term of instruction?

[Kot] The schools for pilots and navigators were the first in the Armed Forces of the Russian Federation to switch to training cadres under curricula of a base higher education. They make it possible to increase substantially the level of fundamental theoretical training of officer candidates and to master the aircraft at a higher level. Under other curricula, for example, the time for studying higher mathematics has been increased from 240 to 600 hours, physics from 140 to 400 hours, and information science from 60 to 200 hours. Not long ago, our VUZes could only dream about such possibilities. What is more, in order to improve humanities and natural science training, a whole series of new disciplines are being introduced, such as "Logic," "Rhetoric," "Economics," "Ecology," and others.

Under the new system of flight instruction, the role of the selection process and orientation of officer candidates will increase, which in turn requires further development of the network of flying clubs and special schools with initial flight training. This is necessary in order to minimize the likelihood of random people ending up in the flight schools.

In 1992, in connection with the division of the armed forces and reduction of the Russian Army, there was somewhat of an overproduction of flight personnel; therefore, about 17 percent of the graduates of flight schools were discharged into the reserve if they so desired (I emphasize, if they so desired). However, we believe that there will be no overproduction, if you can say it that way, of pilots and navigators, much less a shortage of them in the units.

[Lisyanikov] Who is now filling the positions of deputy subunit commander for work with personnel? The Armed Forces Academy of the Humanities, formerly the Military Political Academy imeni V.I. Lenin, no longer has a specialized faculty.

[Kot] Unquestionably, a commander needs an assistant for work with personnel. Someone highly qualified, trained in the field of pedagogy, psychology, sociology, law, and organizational and educational work; in short, a specialist in the field of human behavior. By decision of the Collegium of the Russian Federation Ministry of Defense (14 January 1993), the position of deputy commander for work with personnel is introduced from subunit to large unit, inclusively. This the command of the time, dictated by the course of military reform.

Officers with a higher humanities, technical, and military education will fill the position of assistant commander of aviation subunits, units, and large units for work with personnel. In squadrons and regiments, these

are pilots having experience in working with personnel and an aptitude for educational work.

Today, the Armed Forces Academy for the Humanities trains specialists for work with personnel. A real need is arising for training in a specialized faculty organizers of work with personnel for air regiments and large units, including from flight personnel. Will a specialized faculty be opened for training officers of this profile at the Military Air Academy imeni Yu.A. Gagarin—time will tell. I think this is possible if it is needed.

[Lisyanikov] Several years ago, a governmental decree came out which proposed creating on the territory of the former USSR eight specialized schools which, in addition to general educational training, would teach flying. Are such schools in operation today?

[Kot] Indeed, in accordance with the Decree No 679 of the Council of Ministers of 25 May 1988, it was planned to open eight specialized residence schools in 1990 with initial flight training. But due to a shortage of money and construction capacities in the cities of Bryansk, Gorkiy, Krasnoyarsk, Sverdlovsk, Kirovograd, and Mogilev, these schools were not opened.

Two special residence schools with initial flight training have been operating in the public education system since 1 September 1990—in Yeysk of Krasnodar Kray and in Barnaul. Last year they had their first graduation. More than half of the graduates have enrolled in Air Force VUZes. In all, nearly 90 percent of the graduates have enrolled in VUZes of the Russian Federation Ministry of Defense.

We see the special residence schools with initial flight training as a guaranteed source for manning the Air Force VUZes and therefore provide the comprehensive assistance. We need to revive prestige in serving and belonging to the Air Force.

CIS: NAVAL FORCES

Destroyers, Types 41 and 56

93UM0467A Moscow *MORSKOY SBORNIK* in Russian No 11, Nov 92 (Signed to press 2 Nov 92) pp 51-56

[Article by Capt 1st Rank V. Kuzin: "The Type 41 and 56 Destroyers"]

[Text] The Type 41 should be considered the first destroyer design in our Navy developed and completed in the postwar period. The preliminary specifications for its development were approved on 14 June 1947, and it was assigned to the Leningrad Central Design Office-53 (now the Northern Experimental Design Office, St. Petersburg). V.A. Nikitin, without exaggeration an outstanding Soviet ship-builder, who made a great contribution to the construction of the fatherland's surface fleet in the postwar years, was appointed the chief designer. The observer team from the Navy was headed by Captain of Engineers 2nd Rank M.A. Yanchevskiy.

The preliminary design study took a year, and on 19 August 1948 its results were approved by a decree of the Council of Ministers of the USSR. On 28 August 1949 the technical design was also approved. Simultaneously it was resolved that "for purposes of a more thorough refinement of the destroyer series, with fundamentally new technical approaches, construction should first begin on one prototype, and only then should the series be started."

The official keel-laying took place on 5 July 1950 at Leningrad Shipbuilding Plant No 190 NKSP [People's Commissariat of the Shipbuilding Industry] imeni A.A. Zhdanov (now the Production Association "Northern Wharf"). The destroyer was christened the "Neustrashimyy." In December of that same year, construction was begun on the lead series of destroyers of this design at other ship-building plants as well. The "Neustrashimyy" was launched on 29 January 1951, and a year later, on 26 January 1952, the destroyer underwent builders sea trials. While in "combat aspects" the ship appeared to duplicate the destroyers of preceding types (Destroyers Types 30-c and 30-bis), in "technical" respects it was a qualitatively new stage in the development of ships not only of its class, but also of the fatherland's surface ship-building in general.

According to the design, the "Neustrashimyy" had a standard displacement of 3,100 t and full displacement of 3,830 t. The main hull dimensions were: overall length 133.83 m, beam 13.57 m, and draft 4.42 m. For the first time the hull was made in a flush-deck design, with a slight shear amidships. On the top deck, besides one forward superstructure, machinery and boiler casings and air locks, there were no other superstructures or structures (not counting weapons). The hull had almost no portholes (just six) and in general to the greatest extent possible the destroyer met the contemporary requirements of anti-nuclear protection for surface combatants. The hull assembly was in large three-dimensional, semi-three dimensional and planar sections, as in the construction of the first of the welded ships, the type 30-bis destroyer.

The non-submersibility of the type 41 destroyers was significantly higher than in their predecessors. Their stability was also higher, making the ships less cranky. The main bridge, bridge superstructure, machinery and boiler casings, the main gun turrets, automatic air defense weapons, torpedo apparatus, and the stabilized gun-aiming station were protected by armor which was from 8-mm to 20-mm thick.

The main power plant was fundamentally different from preceding designs. The two-shaft machinery and boiler plant was arranged in two independent autonomous compartments. Each of them, forming an echelon, had its own geared type TV-8 turbine with a rated power of 33,000 h.p. and two main boilers with all the servicing

mechanisms. The automated KV-41 boilers made it possible to implement forced blasting directly into the boiler furnace (for the first time on our destroyers) and generate steam with high parameters, with a pressure up to 64 kg/cm². In contrast to the less powerful power plant of the type 30-bis destroyer, the power plant of the type 41 destroyer was designed to start without preliminary warmup, had better maneuverability, a lower propeller shaft rpm, and reduced weight and size. In addition, at economical speeds there was a nearly 20% fuel savings. For the first time the electrical power system was based on three-phase variable current at 220 V, 50 Hz. The sources of the electrical energy on the ship were two turbo-generators with a power of 400 kW each and two diesel generators (200 kW each) and also a 100 kW harbor turbo-generator.

Two of the latest SM-21-1 130-mm twin stabilized universal deck turret mounts constituted the main artillery on the ship. Each was equipped with its own radar range-finder and optical sight. The turrets had local and remote control. The guns were mounted on a common mount and did not have separate vertical aiming. They were loaded with fixed rounds either semiautomatically or manually. With semi-automatic loading, the rate of fire of the mounts was 14 rounds/minute. The maximum range of fire was 153 cables [15.3 nm], ceiling was 20 km. In each of the two magazines (fore and aft), there were 800 rounds, and 50 each in the ready service lockers. Firing data came from a "Yakor-M" radar with an SPN-500 stabilized aiming station (as with the 100-mm mounts on light cruisers of type 68-bis) and from ZDMS-4 rangefinders, and was processed by the fire-control director [PUS] "Zenit-41." The achieved level of versatility of the main artillery (previous destroyers did not possess this quality) was counted a great success in light of experience of the Second World War.

The air-defense artillery included four SM-16 twin 45-mm automatic guns and two 4M-120 quad-mounted 25-mm automatic guns. The SM-16 automatic gun had a horizontal range of fire of 10.5 km and vertical range of 6.9 km. Fire control came either from the local station or from the PUS MZA, which received its firing data from a "Fut-B" radar. Each half-battery of two SM-16 automatic guns had its own artillery magazine of 4,000 rounds.

The 4M-120 automatic guns had only manual controls, and had a horizontal range of fire of 4.8 km, a vertical range of fire of 3.6 km, and the rate of fire of each barrel of 275-300 rounds/minute. They had one shared magazine of 20,000 rounds.

Torpedo weapons were represented by two type PTA-53-41 five-tube 533-mm torpedo apparatus with the torpedo director system "Stalingrad T-41," which received data from a "Zarya" radar. Overall it was an identical analogue to that established for the type 68-bis light cruisers. The ship could fire two five-torpedo salvos or one ten-torpedo salvo, or fire torpedoes in any other numerical combinations.

The mine rails could accommodate an overload of 48 KB mines or 48 GMZ contact sweep obstructor. For purposes of antisubmarine defense, the ship was equipped with six BMB-1 depth charges (3 on each side), which were controlled (remotely or manually) by the control system "Shar-B." The stern section also was equipped with underdeck depth-charge racks, with 9 depth-charges each. The full reserve of large depth-charges was 105.

The general-purpose electronic armament included an air-search radar ("Fut-N"), surface radar ("Rif") and "Pegas" sonar.

The ship's crew numbered 305 and was accommodated in two living areas, in the bow (11 officer's accommodations and 4 seamen's quarters) and stern (6 officers accommodations, 4 petty officer accommodations, and 5 seamen's quarters). For the first time radiator heating was used to heat the quarters on our ships, and essentially, air conditioning.

Tests showed that it could still not be called a successful ship. Because of the narrow formations of the bow frames in the underwater portion and their flaring, the above-water bow end received a heavy spray, making it hard to use the bow 130-mm and 45-mm gun mounts. In reverse the ship answered the rudders poorly. The quite heavy vibration of the main mechanisms, the stern and the fastenings of the stern main gun turret was another defect. The side layout of the 45-mm automatic guns prevented their joint use in the bow and stern half-batteries. In addition, the SM-16 automatic guns themselves were not serial production models, and the "pre-serial" "Fut-B" radar also was unreliable. Jumping a little ahead, I should note that subsequently they were all replaced by new and different SM-20-ZIF quad 45-mm automatic guns, while the 25-mm guns were removed, and the experimental "Fut-B" system was replaced by the finished serial product.

However the greatest surprise lay in the "shortfall" of full speed and steaming distance. According to the technical specifications, full speed was defined as 36 knots (in fact it got 33.5 knots) at full power from the power plant of 62,400 h.p., with endurance of 20 days. The steaming range at economy speed (14 knots) was supposed to be 5,500 nm, but in the tests it barely "squeezed out" 5,210. Analysis of the causes of the shortcomings then proved to be superficial. The reception document noted insufficient design power of the mechanical plant and errors in the method of calculating the propulsive performance of the ship. In this connection, specialists termed the "Neustrashimyy" an "excessively large" ship, albeit one with significant untapped potential for modernization (this viewpoint became the dominant one long before the start of testing). As a result, by decree of the Council of Ministers, in June 1951 the type 41 series was halted, and destroyers with keels already laid were disassembled.

A.L. Fisher, the new chief designer of the type, who replaced V.A. Nikitin (M.A. Yankevich stayed the main

observer from the Navy) was ordered to "modernize type 41 basically in the direction of a reduction of displacement and change in the shape of the hull." The new type was assigned number 56. The design study began immediately with the technical design stage, since the basic decisions regarding armament, power plant, systems and so forth were kept in accordance with type 41. The hull of the new ship became shorter and more compressed, so some of the necessary internal volume was virtually "pushed" into the top deck. This determined the more developed system of ship's superstructures.

In accordance with the technical design, the type 56 destroyer had a standard displacement of 2662 t and full displacement of 3230 t. The greatest main dimensions of the hull were: length, 126.1 m, beam 12.7 m, draft 4.2 m. Speed: full 38 knots, operational-economic speed 17.9 knots. Steaming range 685 nm at 37.9 knots and 3,860 nm at 14.7 knots. Endurance of 10 days. Crew of 284 men. To compensate for the reduction in stability, it was necessary to look for ways to reduce the weight load. They therefore began to use type AMG aluminum-magnesium alloys. As experience would show, this was a bad decision due to the low fire resistance of the AMG structures. However to some degree the use of light alloys may be explained by the fact that at the time such alloys had become "fashionable" in all the leading navies of the world.

As already mentioned, the armament of the type 56 was nearly analogous to the armament of the type 41 destroyer. The difference lay in the mount of four SM-20-ZIF 45-mm automatic guns, which were arranged in a rhombus: in the bow, stern, and on each side (in the area of the main mast). The 25-mm automatic guns were abandoned, and in place of the SPN-500, an SVP-42-50 stabilized command/rangefinding station was installed with the "Yakor-M" fire radar, and the "Rif" navigational radar was replaced by the "Neptun" radar.

The prototype type 56 ship, the destroyer Spokoynny, was sent for testing by the building plant (No 190 NKSP) in 1953. The first tests showed that they had not succeeded in reaching the design speed with this ship. More profound and detailed analysis of the reasons led to the conclusion that the arrangement of the rudders, brackets of the propeller shafts, and the general layout of the "hull-screw" system were not optimal. A commission headed by the outstanding scientific specialist in the area of ship theory, Rear Admiral of Engineers V.G. Vlasov, recommended that the paired rudders arranged behind the propellers be replaced by one in the centerplane, that fairings be mounted on the propeller shafts, and that four-bladed propellers be used instead of three-bladed. The introduction of these recommendations allowed the Spokoynny to reach the desired 38 knots. The lone Neustrashimyy at this time was ending almost four years of state testing. The fate of this unique ship was not a happy one. It sailed comparatively little and never left the Baltic, and in the 70s it was scrapped. In hindsight the transition from type 41 to type 56 was not entirely

justified. The shortcomings of type 41, including its seaworthiness, were correctable. In addition, this ship had great untapped potential for modernization with regard to displacement. On the contrary, with the type 56 they degraded survivability and habitability, and halved its endurance, and essentially the steaming range. I should note that this judgement is based on the conclusions of active participants in the development of these ships, M.A. Yanchevskiy and V.N. Burov. Nonetheless, the type 56 destroyer went into serial production.

The prototype ship of this type, the Spokoynny, after prolonged testing, was turned over to the Navy in 1956, and construction of the whole series of 27 ships was implemented in the period from 1955 to 1958. The Leningrad ships of the A.A. Zhdanov plant gave the Navy 13 of them in this order: in 1955 the Svetlyy, Speshnyy, Skromnyy; in 1956, the Spokoynny (prototype), Svedushchiy, Smyshlenyy (later the Moskovskiy Komsomolets), Skrytnyy, Soznatelnyy, Spravedlivyy (later after transfer to the Polish People's Republic, it was renamed the Warszawa); in 1957, the Nesokrushimyy, Nakhodchivyy, and Nastoychivyy; in 1958, the Neulovimyy.

In Nikolayev at the 61 Communards plant, they constructed 10 such ships: in 1955, the Blestyashchiy; in 1956, the Byvalyy, Bravyy, Bedovyy, Besslednyy; in 1957, the Burlivyy, Blagorodnyy, Plamenny and Naporistyy; in 1958 the Prozorlivyy.

At Komsomolsk-na-Amure, eight type 56 destroyers were launched: in 1955 the Vyzyvayushchiy and Veskiy; in 1956 the Vdokhnovennyy, Vozmushchennyy; in 1957, the Vozbuzhdennyy, Vliyatelnyy and Vyderzhannyy (later renamed the Dalnevostochnyy Komsomolets); in 1958, the Neuderzhimyy. This concluded their construction.

The type 56 destroyers were to be the last torpedo-artillery ships of this class in our fleet. Their disparity with the development new weapons and modes of waging war at sea grew more and more evident, and looking at it in hindsight, they came on the scene about ten years too late. The "new" increasingly crowded out the "old," although in this period torpedo-artillery destroyers were also being constructed in the U.S., the Forrest Sherman class (1955-1958), in France, the Surcouf and Dupres classes (both series 1955-1958), and in Holland, the Holland and Friesland classes (1954-1958). The English were more decisive, curtailing construction of classic destroyers somewhat earlier than the rest.

A comparison of the basic elements of contemporary destroyers of different countries shows that at the time the ideology and the basic technical approaches on the basis of which these ships were constructed were identical, but the quality of the individual types of armaments had significant differences. For example, our then-new SM-2-1 semiautomatic twin 130-mm artillery mount, in comparison with the 127-mm single-barrel

American Mk.42, had significantly limited combat capabilities in fire on air targets (basically due to the fire control system), and significantly lower rate of fire (by a factor of 3.5), with the result that its combat effectiveness was less than half that of the American. Therefore in main artillery the three-gun Forrest Sherman outgunned the four-gun Spokoynyy.

They set about strengthening the antisubmarine armament of the type 56 destroyers with type 59-plo in 1958. Eleven ships of this series (Smyshlenyy, Blestyashchiy, Byvalyy, Besslednyy, Burlivyy, Blagorodnyy, Plamenyy, Naporistyy, Vyzyvayushchiy, Vdokhnovennyy, and Vozmushchennyy) underwent modernization, during which the second torpedo apparatus and depth-charge throwers were removed, A/S stations were equipped, and two RBU-6000s or RBU-2500s were installed. The remaining torpedo apparatus was adapted to fire both anti-ship and anti-submarine torpedoes. Another series of destroyers (Skromnyy, Svedushchiy, Soznatelnyy, Spravedlivyy, Skrytnyy, Nesokrushimyy, Nakhodchivyy, Nastoychivyy and Vozbuzhdennyy) were modernized in 1969 to 1971 more fundamentally, as type 56-a. In the course of the refitting, all the weapons mounted in the stern from the first torpedo apparatus (second PTA-53-56 torpedo apparatus, three SM-20-ZIF automatic guns, stern SM-2-1 turret), and also the main mast with the antennas mounted on it were removed from the ships. In place of these they set up the "Volna" air defense missile system, with a double-beam launcher and six SAMs in the magazine, and also the "Yatagan" fire control system, whose antenna was mounted on a turret-like base installed in place of the main mast. Near the stern smokestack on both sides, two new AK-230 30-mm twin automatic antiaircraft guns were mounted with the fire control system "Rys." The antenna of the MR-310 three-coordinate general search radar appeared on the fore mast (on some type 56-a destroyers, the MR-300 radar).

From the architectural standpoint, these ships looked quite strange, but began to serve their purpose to a much greater extent. Since modernization to type 56-a (strengthening of air defense) took longer and was laborious and expensive, the remaining destroyers in the series did not undergo refitting and served out their time in their initial form. One of them, the destroyer Svetlyy, later received a stern takeoff and landing pad from which flights of the Ka-15 helicopter were practiced for the first

time. The destroyer Bravyy later was refitted as the type 59-c, and the destroyers Neulovimyy and Prozorlivyy as type 56-u. The destroyers Bedovyy and Neuderzhimyy were finished in accordance as type 56-m even before they were sent to the Navy.

In the 70s the destroyer Spravedlivyy, refitted as type 56-a, was transferred to the Polish Navy and was there renamed the Warszawa. There were no other transfers of the type 56 destroyers abroad. Also in the 70s, China began construction of Lyuyda a type destroyers, which practically duplicated the 56 type, but were equipped with antiship cruise missile launchers instead of the torpedo apparatus.

Our Spokoynyy class destroyers were operated very intensively for around thirteen years in all four fleets, until they began to be taken out of service.

In 1986 through 1989 the type 56 destroyers Blestyashchiy, Besslednyy, Burlivyy, Vdokhnovennyy, Vyzyvayushchiy, Veskiy, Vozmushchennyy, "Vliyatelnyy," and Dalnevostochnyy komsomolets were decommissioned from the Pacific Fleet; from the Northern Fleet, the Moskovskiy komsomolets, (1986), the Byvalyy (1988), the Skromnyy (1989) and the Spokoynyy (1990); from the Baltic Fleet the Svetlyy and the Speshnyy (both in 1989). The Naporistyy (1987) and the Plamennyy (1991) were removed from the Black Sea Fleet.

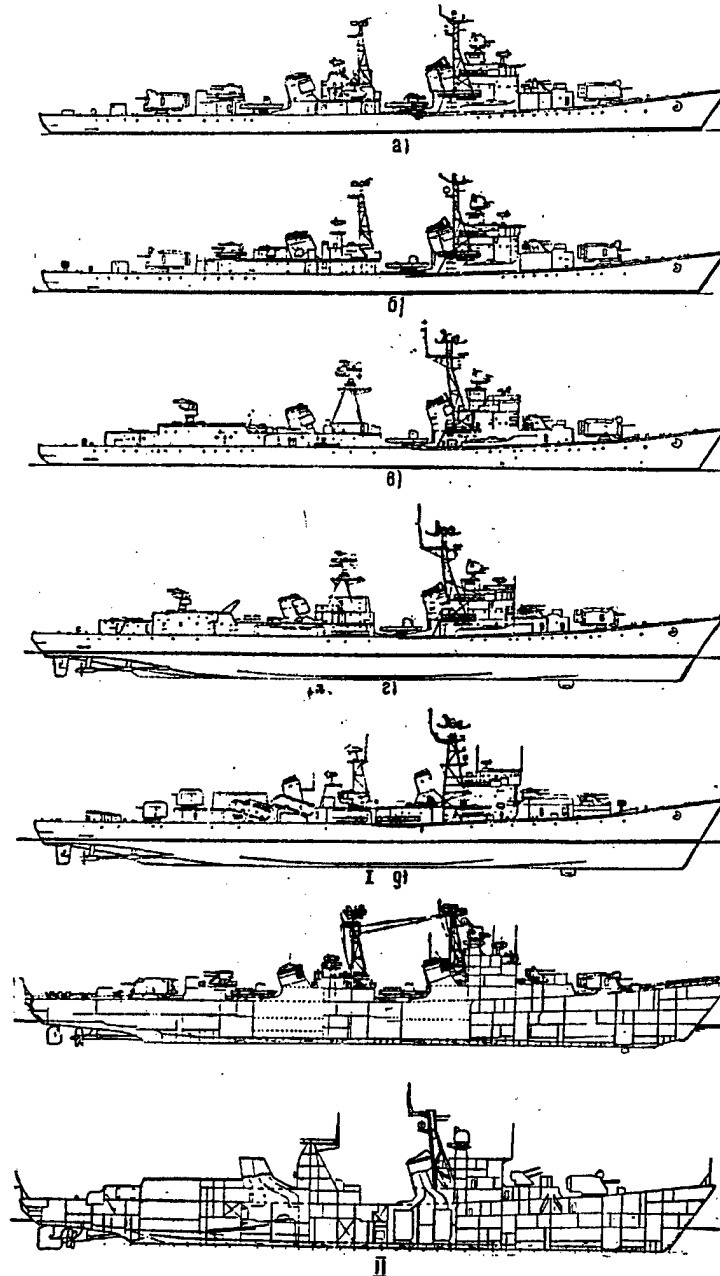
The type 56-a destroyers Vozbuzhdennyy and Skrytnyy left the Pacific Fleet in 1989. In the same year the Nastoychivyy was decommissioned from the Baltic Fleet, and the Nakhodchivyy from the Black Sea Fleet; the Soznatelnyy (Black Sea) "retired" in 1988.

The destroyer Bravyy, a type 56-c destroyer was removed from the Black Sea Fleet in 1987, and the type 56-u destroyer Neulovimyy in 1990. The type 56-u Prozorlivyy was removed from the Baltic Fleet in 1991.

In concluding this survey of postwar destroyer development, I would again like to note that despite the errors and individual deficiencies, the type 41 and 56 ships were landmarks not only in their class, but also in the overall ship-building of the fatherland. Many major technical approaches achieved and refined in them became the basis for development and creation of surface ships of the main classes of subsequent generations.

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I. Side View of Destroyers: a - Type 56; b - Type 56-plo; c - Type 56-c; d - Type 56-a; e - Type 56-u. II: Longitudinal Structural Section of Hull of Type 56 and Type 56-a



Operation 'Kavkaz'

93UM0562B Moscow *MORSKOY SBORNIK* in Russian
No 3, Mar 93 pp 70-72

[Interview with Black Sea Fleet Chief of Staff Vice Admiral Petr Grigoryevich Svyatashev by *MORSKOY SBORNIK* Correspondent Captain 3rd Rank A. Fedorov: "Operation 'Kavkaz'"]

[Text] They say that history will put everything in its place and will give everything a proper assessment. And that certainly is true. But today thousands of Russians are performing service outside Russia's borders, on the territory of other sovereign states. And where is the guarantee that another, just as hasty and thoroughly rash, outcome will not become the cause of the death of dozens of people? When will steps on a state scale be carried out by the forces of the armed forces alone, both the one, taken separately, navy with indifferent noninterference and the opposition of representatives of the local authorities?

The aspiration to sort out the situation that developed has forced our correspondent to turn to one of the direct leaders of the evacuation of Russian servicemen from the territory of Georgia that received the semi-official name "Operation 'Kavkaz'", Black Sea Fleet Chief of Staff Vice Admiral P. Svyatashev.

[Fedorov] While talking with the officers of Poti Garrison and while reading newspaper articles, you direct attention to the fact that the evacuation actually began in November 1992—more than a year after it became clear that the withdrawal of troops and ships was inevitable. The way that this operation was conducted, that reminded us more of the evacuation of an unsuccessful amphibious assault than a civilized withdrawal of families and personal effects of officers and warrant officers, is also surprising. The impression is being created that the fleet command authorities were operating at their fear and risk in the absence of political and diplomatic support by the Russian Federation Ministry of Foreign Affairs. Is that so?

[Svyatashev] I would not be so categorical in my assessments. Actually, Moscow did not always react to events in Georgia that affected our servicemen in a sufficiently timely manner, while permitting the fleet to independently solve its problems. On the one hand, that is of course a high degree of trust but, on the other hand, the absence of political decisions at the highest level gave rise to uncertainty, guarded and alarming anticipation. And if the fleet command authorities paid only with a headache for this uncertainty, the officers and warrant officers who served in Poti felt it with the weight of flak jackets and with the fear for families in an atmosphere of constant stress. In my view, we needed to resolve all of the problems of grand policy through bilateral negotiations prior to the initiation of the evacuation. The Russian leadership needed to make the appropriate political and administrative decisions. Those decisions still haven't been made. Therefore the organization and

technical support of the withdrawal of the garrison from Poti and the responsibility for its conduct were transferred to the Black Sea Fleet command authorities.

How has this turned out for us? The lack of Russian Ministry of Foreign Affairs support created favorable grounds for conflict situations: it wasn't clear where and how to locate ships, people and equipment—we had to resolve all of that "on the fly". Therefore "Baskunchak" was shot in Sukhumi and therefore we encountered a more than cool reception in Sochi and in Novorossiysk, and therefore we are still experiencing colossal material and moral difficulties on the quartering of our brigade at Novorossiysk which affect both its combat readiness and the situation in families. But first of all the lack of political decisions has compelled us to independently overcome the opposition of the Georgian side.

[Fedorov] Petr Grigoryevich, let's dwell on this issue a bit more. How was the opposition from the Georgian side manifested? How often did you encounter that?

[Svyatashev] In my opinion, the causes of that opposition are understandable: the Georgian leadership, "having marked" the creation of its own navy with the appointment of several officials, had already viewed the ships of the Poti Brigade and the equipment of the training center as belonging to Georgia. That is why there were numerous threats from various officials: "We will not permit!", "We will not permit the withdrawal of weaponry and equipment!"—we had to listen to the statement of the Georgian president's representative that he does not have reliable information confirmed by documentation on the impending withdrawal of weaponry and combat equipment and that the Georgian side will take all steps to prevent that. Fortunately, words—all of that was just words. It is much worse that this confrontation was manifested in specific deeds.

You certainly know about the case of the attack against the KAMAZ that was hauling personal effects of a Poti Garrison serviceman: three unidentified individuals who waited until the loading was completed, raced from a neighboring train and opened fire at point-blank range against two warrant officers who were sitting in the truck. And although both servicemen were seriously wounded, no Georgian medical institution would render assistance to them. We were compelled to bring a team of doctors in from Moscow through Ochamchira to Gudauta and from there by helicopter to Poti. Unfortunately, one of the victims soon died from his wounds. And the other warrant officer was transferred by small craft to Batumi—only there did they agree to render skilled medical assistance to him.

Yes and the threats had material confirmation—a "Grad" launcher and a tank that were in the port, machineguns on the territory of the port and train station—all of that created a real threat of the outbreak of a conflict with the use of weapons. But common sense prevailed—it prevailed thanks to the fact that we still encountered people who sensed the value of human life

among both the politicians and local leadership—one of the representatives of authority in Poti promised to do everything possible to prevent bloodshed in any case. And he fulfilled his promise. And to do that you need to have a wise and courageous man because Shevardnadze's representative, who had arrived in Poti, on the contrary, appealed to the people in every way possible to "take all steps".

The threats remained threats. But you and I are military people and we understand that the anticipation of a gun shot in the back is no less exhausting than open armed confrontation.

[Fedorov] So, what is this—simple luck or a lucky combination of circumstances that the withdrawal of the Poti Garrison did not have to be paid for with blood? Or were there also other reasons?

[Svyatashev] It's impossible to exclude an element of luck—a spark could have caused a fire in that inflamed situation, a random burst of automatic fire at the port—could have resulted in serious consequences. Therefore, a comprehensive guarantee of the people's safety was laid at the foundation of the evacuation plans from Batumi, Sukhumi and Poti. And we are not to blame for anyone's death. That was achieved, first of all, thanks to political and organizational measures: restraint in our dealings with the local authorities and population, performing guard duty on the upper deck and near the cabins in flak jackets, patrolling the territory of the port and military facilities. I must point out that the Georgian militia also assisted us—actually, in the last days in Poti the situation was extremely agitated. But we left the territory of Georgia without firing a single shot. We carried out our primary mission—the withdrawal of families, secret documents and weaponry.

[Fedorov] Petr Grigoryevich, even in a normal situation, the transfer of a squadron of combat ships requires centralized command and control with the precise coordination of the fleet and military district PVO [Air Defense] and coastal defense units. And all the more so if the ships are traveling with families on board and with munitions in the holds, and especially near areas of combat operations. Did you manage to ensure that coordination this time?

[Svyatashev] If you talk about the transfer itself, there were no problems here—we had sufficiently rehearsed that. But an evacuation is not only loading, unloading and a transit by sea. Although the loading also did not occur without difficulties that arose, isn't it strange, not from the lack of leadership but as a result of its unexpected appearance.

At that moment when the military and civilian ships were already prepared to leave Poti (and we had decided to leave closer to evening when daytime passions would have subsided somewhat), an unexpected command arrived: "Take the PVO unit officers from Poti." What to do? To delay the withdrawal of the squadron would have meant to consciously incite the situation: shots could have rung out at any moment, yes and the weather

forecast would have changed. But it was impossible not to carry out the order. We had to resort to a violation: at the time when the primary part of the squadron had already left Poti, one of the BDK's [landing craft] took the PVO brigade officers on board. I am confident that if the person who issued the order had been completely in command of the situation, he would either have changed his decision or he would have issued that order significantly earlier. If we, the fleet command authorities and command post, had to work practically around the clock: an hour did not pass by when something did not have to be resolved or changed—you can imagine what it was like for the ship commanders who were carrying out the evacuation.

And yet we suffered more from the lack of coordination. It wasn't enough to withdraw people and equipment to Novorossiysk or Sochi—they should have been waiting for them there. And Novorossiysk greeted us more than coolly—the stingy bosses certainly more warmly greet poor relatives. And the matter is not in words and posters but that we were refused elementary assistance while flouting both international and human norms. We attempted to break that attitude toward us—we communicated with the Russian Federation Ministry of Defense and with the Committee for Extraordinary Situations. And the game of "depraved telephone" began: the committee called the Novorossiysk head of administration, he gave the order to the chief of the port who in turn addressed his dispatcher. And the dispatcher said: "No." We had to operate independently and to locate the ships, small craft and civilian ships wherever we could. As a result of the fact that the small craft were not sheltered from the storm, three of them, despite the selfless actions of the crews, sank under the impact of icing. But don't feel sorry for the small craft—they have already been salvaged—but for the people. Although none of the seamen physically suffered, they experienced a crushing blow morally. At sea, I think, they conducted themselves heroically. They were going home. But look at how Russia received them...

We had to encounter a lack of understanding, indifference and confrontation even later on. For many, Novorossiysk was not the termination point: people and personal effects had to be shipped further, there were no shipping containers, no vehicles, chaos, red tape... Therefore, we had to handle all of that ourselves and to work out the organization while on the move. I sent a telegram addressed to the Transcaucasus Military District chief of staff with a request to render assistance and we took steps directly on the spot... So we nevertheless established order but only at the end of the evacuation—in the twilight, so to speak. But if the appropriate order had arrived in a timely manner from Moscow, many problems simply would not have existed.

[Fedorov] Of course, we can justifiably call what the Black Sea Fleet seamen did while evacuating Poti Garrison heroism. But wasn't that heroism because of the leadership's inability to organize support? We all know

what kind of weather there is on the Black sea at that time of year and that a hasty evacuation cannot proceed sufficiently smoothly.

[Svyatashev] It was clear for a long time that sooner or later we would have to leave Georgia. Therefore, the fleet command authorities—both Admiral Kasatonov and vice Admiral Larionov—began at their own fear and risk to withdraw weaponry, munitions and combat equipment from the territory of Georgia. This equipment was nevertheless unsuitable for the Georgian Navy—it does not have these ships—and the equipment would simply have been looted. Incidentally, this was the fate of the majority of that equipment that we could not withdraw from Poti—they were rendered unserviceable literally before our very eyes: they removed tires from automobiles and everything that could be removed became “spare parts”.

And we had to haul away the combat ships, weaponry and munitions for another reason—all of that could inflict enormous harm in today's Georgia. Imagine how over three boxcars of artillery projectiles and nearly 300 mines could be used in the Georgian-Abkhazian conflict or what harm could be inflicted to the peaceful population with the uncontrolled use of this lethal cargo. Poti Brigade ships ensured the withdrawal of the munitions but we also had to allocate other ships to assist them. So, we certainly cannot speak about inaction. It's another matter that a wide-scale and painstakingly planned and organized evacuation could have been conducted only after making all of the appropriate political decisions and after reaching the appropriate agreements. It is this, in my view, that is the key to the solution of many problems which we encountered and which we are attempting to resolve today—the Novorossiysk leadership still opposes stationing our brigade there.

[Fedorov] Thanks for the comprehensive interview. We all hope that the Black Sea Fleet seamen will henceforth honorably resolve all of the problems that arise during this difficult, so called “transition period” in the life of the fleet. We would just like for everyone to learn their lessons and to arrive at timely conclusions based on what has occurred...

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Discussion of Evacuation of Poti

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[Article by Captain 2nd Rank Vladimir Pasikin, under the rubric: “Cruises and Flights”: “The Last Convoy: Or How The Evacuation of Refugees From Poti Concluded”]

[Text] Having completed the difficult passage along the Caucasus coast and having withstood a multi-hour struggle with the raging elements and, having emerged as the victors in the single combat with the stormy sea, the Black Sea Fleet seamen were exhausted but none of them

would have assumed that they would find themselves in an even more extreme situation with their entry into the long-awaited port.

Bonfires and Hopes Warmed Them

As it was planned, the evacuation of the Black Sea Fleet Poti Surface Ship Brigade that had lasted more than a month concluded at the end of last year.

“All unit military personnel, workers and employees who desired to be evacuated left Poti,” said Black Sea Fleet Deputy Chief of Staff Captain 1st Rank Yuriy Nichik, “what is more, the families of Russian servicemen and certain non-navy subordinated units, veterans and the Russian-speaking population who were experiencing oppression by the Georgian side were evacuated”.

The evacuation of people and combat equipment occurred under conditions of opposition both by the Georgian authorities and by various militarized formations. Threats and marauding with regard to the evacuees became an ordinary matter. Firing occurred during the day and at night. It was dangerous to be not only on the streets but also in one's own apartments.

People, who were being tormented by blackmail, violence and anticipation and who were afraid to be left behind and not evacuated, spent several days and nights in the open air, snow and rain at the piers. Bonfires that were started on the shore and the hope for a rapid end to their torment warmed them.

The landing craft accepted on board people in numbers that exceeded their troop capacity by a factor of 1.5-2. Black Sea Fleet seamen gave up their places in the cabins and crew's quarters to women and children, fed the refugees free of charge and gave them moral support.

Black Sea Fleet Seamen Did Not Abandon Anyone

During the concluding stage of the evacuation (from the beginning of November until the end of 1992), nearly 5,000 servicemen, their family members, workers and employees from the Russian-speaking population, 3,000 pieces of equipment and weapons, 220 official and personal automobiles, and nearly 9,000 tonnes of household goods were transported from Poti. The departing ships were loaded until the last opportunity already at the roadstead where the landing craft had brought the tormented people. Black Sea Fleet seamen did not abandon anyone. According to the agreement, only 25 men from the 19th Army's surface-to-air missile brigade were left behind to transfer equipment to the Georgian side.

And then the last convoy of 15 military and civilian ships left Poti. There were—seven landing craft (DK), a small antisubmarine warfare ship (MPK-207), a fire-fighting boat (PZhK-47), a harbor tug (RB-193) and a harbor diving tender (RVK-367) that were escorted by the Dauriya Command and Control Ship, the SKR [escort vessel] Bezukoriznennyy, a medium assault ship

(SDK-82) and a seagoing tug (MB-304). Some of the small vessels with limited seaworthiness were towed to conserve fuel and engine service life. Poti Brigade Commander Captain 2nd Rank Vasiliy Kishin exercised overall command of the operation. The situation was complicated by the acute shortage of personnel in the fleet that had recently been exacerbated. Therefore, there was only one naval warrant officer and two seamen each on the majority of the landing craft.

Through Bad Weather

Having formed the convoy on the outer roads, they set out on 25 December at 1700 hours. Soon the weather began to deteriorate. Strong snow squalls with winds of over 20 meters per second that drastically reduced visibility came crashing down with a fury upon the ships and small craft and tightened the tow lines. They barely managed to maintain a speed of eight knots.

They decided to wait out the bad weather in Sochi Port which all of the ships and small craft entered with the exception of Bezukoriznenny which remained on the outer roads. The wind abated somewhat and they continued the movement in the morning. They had to hurry because the forecast for the subsequent days did not augur well. And it was entirely justified when the wind became increasingly strong during the approach to Novorossiysk. The sadly famous Novorossiysk "bora" made itself known. One of two tow ropes, which Dauriya was using to tow RB-193 and a landing craft, broke under the onslaught of the elements. Steel did not withstand and broke but the seamen withstood...

Considering the critical situation, while approaching Gelendzhik the convoy commander issued the order to RB-193 and the landing craft to proceed to Golubaya Bukhta and to wait out the bad weather there. The RB, overcoming the pressure of the elements with difficulty, towed the landing craft toward the shore. Its course was corrected based on the location of Dauriya. The remaining ships, in groups and singly, continued their movement toward Novorossiysk.

Abeam of the settlement of Kabardinka, the wind increased to 25 meters per second and snow squalls followed one after the other. The landing craft, especially those that were being towed by SDK-82 that was not modified to do that, began to be whipped by the storm wave, all the more so that the forced turn toward port placed their sides toward the steep wave.

The Imperturbability of the Novorossiysk Authorities

At the same time, Senior Naval Commander in Novorossiysk Captain 2nd Rank Igor Tulchinskiy had been conducting fruitless negotiations for many hours with the port authorities on the possibility of the ships entering Novorossiysk.

"Port Chief Valeriy Bykov," said Tulchinskiy, "authorized the entry and mooring at the pier of only Dauriya

and MPK-207. The landing craft and other small vessels that needed that most of all did not receive the 'o.k.' to enter the harbor."

Then Tulchinskiy contacted the city administration duty officer. That also did not produce any results. He appealed to the mayor of Novorossiysk. Valeriy Georgiyevich Prokhorenko responded: "I do not command the port."

Tulchinskiy contacted the port captain.

"I cannot make the decision," explained Georgiy Popov, "I am only responsible for the safety of entry into the port and for departure from it."

Georgiy Leontyevich refused to provide pilots and suggested anchoring the small vessels at Aleksino.

"Aleksino, that is essentially a poorly protected outer road. Moreover, with a dangerous entry, with shoals," Tulchinskiy explained to me, "there is no navigation support there. To enter there at night without pilots—is a risky venture. That was not a solution to the situation for the crews of the landing craft."

Captains 1st Rank Yuriy Nichik and Viktor Shevchenko became involved in the negotiations on the entry of the military ships and granting tugs and piers to them for mooring. All for naught.

In fairness, I need to say that, although with a great deal of red tape after insistent requests and demands, the tug Besposhchadnyy left the pier. But it hardly managed to reach the gates of the port, sensed the strength of the elements, and turned back, not wishing to take the risk.

Captain 2nd Rank Tulchinskiy requested another tug.

"Give us an official request to render assistance," the port authorities set a formal demand for such a critical situation. Losing precious time, Tulchinskiy made an official request, however, only 1.5 hours after the request, at 1:30 a.m., did the tug Tigris put out to sea. But it also did not render assistance, having cited the fact that this was not the port's area of responsibility.

At that time, the only possible decision was made in that critical situation: to enter the port on their own. Of course, that largely complicated the task for the military seamen. Night, a storm, frost, an unfamiliar location... however, there was no other solution.

Had They Really Forgotten in Novorossiysk?..

This simply appears to be improbable when you imagine the entire picture: at the approach to Novorossiysk Port, not far from the sadly famous place of the loss of the t/kh [diesel ship] Admiral Nakhimov, the tiny landing craft that were barely kept afloat were riding out the storm in a night sea. And the port authorities and the city administration sat idly by...

How quickly here they forgot the tragic events of September 1986 when military seamen led by the Black Sea Fleet commander himself became involved in rescue

work? The diesel ship was not a military ship but the Black Sea Fleet seamen, without thinking about departmental affiliation, did everything within their powers and even more in those days. I saw with my own eyes how the seamen fell from fatigue, how then Fleet Search and Rescue Service Deputy Chief Captain 1st Rank Artur Rogozhin, who directed the fleet forces directly at sea, collapsed into a chair of rescue ship SS-21: how SS-21 Commander Captain 3rd Rank Valeriy Kuzmishchev slept a total of 2-3 hours per day.

Had they really forgotten how, while risking their lives every second, the Black Sea Fleet divers searched for the dead along the complexities of the diesel ship's passages and ship's ladders; how they saved each other, descending into the depths not only during the day but also at night; and how twice flags were lowered over the ships and fleet ships in grief over deceased comrades—Naval Warrant Officers Shardakov and Polishchuk...

Six years have passed since those tragic events. Now military seamen found themselves in trouble and the once hospitable city and its authorities turned away from them, casting them to the whims of fate and the elements. They displayed criminal inactivity if you can't say more.

It's hard to believe that. Is this the same Novorossiysk that fearless Black Sea Fleet seamen, while giving their lives, defended and liberated in the years of the Great Patriotic War? Is this that same hero-city?

"What Happened to Our People?"

Has everything really changed so rapidly? Have the sacred bonds of brotherhood and traditional maritime mutual assistance been forgotten and flouted? I am already not talking about the sense of duty, honor and ordinary respectability! It has happened more than once when Black Sea Fleet seamen, while risking their lives, save their own and foreign vessels from disaster. Now the Novorossiysk port authorities have scorned everything: both the international convention on the rescue of human life at sea and the elementary norms of humanity... Moreover, isn't it paradoxical that the port authorities even lodged a protest with regard to the unsanctioned entry of the ships into port.

And meanwhile the situation continued to deteriorate. Having entered the port and having been freed from the landing craft it was towing, SKR Bezukoriznennyy received a distress signal from DK-634 and went to assist it at a speed of 22 knots. Dauriya and MB-304 did the same.

When the SKR approached the SDK-DK group, the small craft launched three red flares—a distress signal. They need to urgently rescue people. The SKR, having set anchor on the windward side, covered the small craft and attempted to remove the seamen from it. The first and second attempts were not crowned with success—the conditions and the great risk turned out to be too difficult.

Then Bezukoriznennyy and Dauriya and MB-304 that were approaching began to circle the SDK-DK group, warding off the waves and sheltering the landing craft from the wind. They, just like large steel birds, protected those weakened friends who had fallen behind the flock. This maneuver helped the landing craft to withstand and to enter the port.

By the morning of 30 December, all of the ships and small craft had entered the port and were anchored wherever there was free space. The tormented seamen yearned for a long-awaited rest. The port authorities demonstrated not only indifference but even hostility with regard to them. "You have entered the port without authorization and therefore remove your small craft to wherever you'd like"—the port authorities advanced that demand. But the weather forecast remained unfavorable.

"We attempted to secure our small craft," Captain 2nd Rank Tulchinskiy told me, "to change their anchorages, but on 31 December, on New Year's Eve, we couldn't find any of the leadership. The same thing was repeated the next day."

Misfortunes Continue

On 1 January, the fleet hydrometeorological center transmitted a storm warning for Novorossiysk which stated that the wind would increase to 20 meters per second, the seas would be up to five balls, and, on 2 January—a new warning which reported that a north-easterly wind with a strength of 30-35 meters per second was expected in Novorossiysk. And actually the Novorossiysk "bora" showed its severe disposition that next time. At 3 a.m., the wind reached 27 meters per second and, at 2100 hours, 34 meters per second. The increase of the wind and waves was accompanied by the lowering of the air temperature to -9°. Rapid icing of the ships began.

If a wave is not so dangerous for high-sided ships, low-sided ships ice up very rapidly which can result in the loss of stability and therefore, to capsizing.

The struggle for survival was exhausting. Under the icy sprays with the wind penetrating to the bone, the military seamen, without a breather, chipped away the ice and threw it overboard. The steady rate of work compelled the replacement of people on the deck every 40 minutes and the interval between shifts was barely enough to rest and dry off. The mooring lines snapped, unable to withstand the pressure of the elements. The wind and waves beat the small craft into each other and into the pier. Added to the icing were holes through which outside water entered.

The situation was further complicated by the fact that the day before, the large ships, having carried out their assigned task, had left and the port authorities did not intend to assist the small craft.

"Port Captain Georgiy Popov refused to activate the emergency rescue forces and did not find anything better to propose to the small craft than to beach themselves," Igor Tulchinskiy told me.

On 3 January at 05:32 hours, AK-634 was the first to sink and the second, DK-533, sunk at 06:52 hours. At 08:15 hours, DK-530 sunk along with a container. The remaining small craft managed to stay afloat.

"However, even after that ChP [extraordinary occurrence], the port authorities did not show sympathy to our misfortunes," continued Tulchinskiy, "they gazed imperturbably at the tragedy of the situation, without sensing any responsibility whatsoever for what had happened. We were also not granted any places to relocate the small craft, despite the visits that I and the brigade commander made to the main dispatcher and the port captain. We found understanding only from the ship repair plant director who authorized us to anchor the small craft near the plant pier for a time and even allocated a tug to us to do that..."

"I have thought about this and well the indifferent port workers simply did not have any compassion or feeling of solidarity with the military seamen. But don't they really understand they their inactivity is criminal and that it inflicted a great deal of material damage and, the main thing, that it subjected the most precious thing—people's lives—to unjustifiable risk."

And only toward the evening of 4 January were the landing craft that remained afloat towed to the SRZ [ship repair yard] piers and the TDKK, RVK and RB were transferred to other port piers and only because they were in the way at their former locations.

Later, of course, the diving ship and salvage tug that arrived from Sevastopol and also the Novorossiysk floating crane raised the sunken landing craft but quite a bit of time, manpower and equipment was spent on that, that same equipment for which we had petitioned the port authorities. And really all of this could not have happened if the city and port authorities had manifested foresight and decency. Yes and the degree of mutual assistance and maritime solidarity should not be measures in rubles and SKV [freely convertible currency]...

But the epoch of the evacuation from the Caucasus ended on that dismal note. Fortunately, everything occurred without victims. But the question remains: will a legal assessment be given to what has occurred and will the appropriate steps be taken? Will the Novorossiysk city and port authorities extract lessons from what has occurred?

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CIS: REAR SERVICES, SUPPORT ISSUES

Clarifications of Law on Military Service Obligation

93UM0482A Moscow KRASNAYA ZVEZDA in Russian
6 Apr 93 p 2

[Article by Oleg Vladikin, KRASNAYA ZVEZDA correspondent: "The 'Military Package' of Laws: Answers, Explanations, Consultations"]

[Text] Today we are again addressing questions associated with implementation of the Law on Military Service Obligation and Military Service. The explanations are given by experts of a number of directorates of the Russian Federation Ministry of Defense.

To begin with, questions which we addressed to Colonel Anatoliy Shakhov, Deputy Chief of a department of the Main Organization-Mobilization Directorate of the General Staff of the Russian Armed Forces.

Article 16 of the Law, which defines the new status of Suворov schools as cadet schools, has evoked heightened interest among readers. In particular, many are asking: Is it true that any ward of a children's home can be enrolled in a cadet school without taking any examinations?

Indeed, as is indicated in Part 1 of this article, orphans or adolescents who are left without parental care are enrolled in a cadet school based on results of an interview and a medical examination. What will be the selection criteria? This will be determined by the Statute on Cadet Schools, which the government of the Russian Federation is to approve before 1 June 1993. For the time being, we at the Main Organization-Mobilization Directorate of the Russian Armed Forces General Staff were told about them in general terms.

Let us say, any ward of a children's home can in principle take advantage of this right, if he goes through an interview at the examining board, which checks the overall level of his knowledge, outlook, and mental readiness for studies under the specific conditions of a cadet school and makes sure of his ability and desire to observe discipline and the lack of any tendencies toward violations of the law. It is not envisioned that any marks will be given based on the results of the interview; only a positive or negative decision on enrollment of the candidate is made on a competitive basis, provided, of course, that the physicians have no serious complaints about the person's health.

The following question aroused the interest of compulsory service personnel. Since, they say, it is recorded in the law that they are not obligated to wear the military uniform off base, where will they keep their civilian clothing and what will the procedure be for using it?

Part 2 of Article 38 states that a serviceman is relieved of the obligation to wear the uniform only when he is on

holiday, on pass, or on leave. Thus, for compulsory-service soldiers and sergeants, it follows from this article that they are authorized to wear civilian clothes only after having been given pass or leave papers. As we know, servicemen residing in the barracks must store their personal things in subunit storerooms. The military unit commander establishes the procedure for retrieving items from the storerooms.

Quite a few readers have asked the editorial office to clarify Article 13 of the law, which talks about the special rights of citizens who have achieved noticeable success in applied military sports activities. How will they realized the benefits guaranteed them when entering military service?

Colonel Shakhov informed us that based on this article, during the induction into military service, young men having a top ranking or sports title for applied military sports have the right to apply to determine the branch of the army where he will be able to perform duties in a specialty corresponding to his training. The induction board must take into account and satisfy the inductees wishes if possible to do so.

As was confirmed by Colonel Yuriy Sheremeta, a group chief of the Main Training and Cadres Assignment Directorate of the Russian Federation Ministry of Defense, the same level and orientation of sports qualifications opens up for a young man the prospects of non-competitive enrollment into a military educational institution [VUZ], that is, of course, if the sports training specialization coincides with the profile of the VUZ chosen. Then, for example, a top-ranked parachutist only has to pass the entrance examinations to the Ryazan Higher Airborne School to be enrolled, regardless of the number of points scored. The same can be said about a young man having a top ranking in motor sports if he decides to enroll in one of the three Russian higher motor vehicle military schools. At the same time, it must be noted that a complete list of the applied military sports giving such a right is still in the stage of preparation.

Incidentally, the topic of "higher education and military service" is often present in people's requests for comments on some provisions of new laws, especially on training of reserve officers. In particular, they ask if it is a fact that students will be study under curricula of military science departments of VUZes only on a voluntary basis. What is the contract which must be signed by those who agree to train as a reserve officer? To what does this obligate them?

Colonel Anatoliy Silkin, a group chief of the Main Training and Cadres Assignment Directorate, answered these questions in this way. It has been determined by statute today that enrollment of students to go through military training is done according to their personal requests. However, in the future they will be obligated to conclude a contract which gives them the right to receive an additional stipend from the Ministry of Defense. The

government of the Russian Federation will establish the size of the stipend by the new training year.

The content of a typical contract is now being drawn up jointly by the Ministry of Defense and Ministry of Science, Higher Education, and Technology Policy. This document will be largely similar to what servicemen will begin signing in the troops. Only there they will assume a commitment to serve for a specific period of time in the armed forces, while students assume a commitment to be reserve officers after graduating from the VUZ. True, such an obligation based on Part 3 of Article 19 of the law results in the possibility of being called up into military service at any time as soon as the edict of the president of the Russian Federation concerning this is issued. That is to say, every student who signs a contract to go through military training should be clearly aware that, if necessary, he can be called up as an officer for 24 months immediately after graduating from the VUZ. Later on, he himself will decide after completing his term of service: to be discharged from the armed forces or sign another contract for a new term of service. But then, he has the right to the latter even without a presidential edict. After completion of instruction in a course of the military science department, he will also receive a higher education diploma.

By the way, many of the VUZes that until recently insisted on abolishing military training of students are now striving so purposefully to keep their military science departments. You see, in accordance with the law, a graduate of an institute who has not served in the army and has not received military training is called up for 12 months...

In general, everything that is associated with service under contract raises a mass of questions among readers. You see, any detail here is a novelty. An officer, for example, signed a contract under paragraphs "b" or "c" of Part 1, Article 33. But in time he is offered a position to replace a colonel, since his business and professional qualities make him suitable for it. What is to be done then if Article 42 prohibits such an appointment in this situation?

Colonel of Justice Vyacheslav Sototskiy, chief of the Department of Legal Support of Work on Draft Laws of the Administrative Directorate of the Russian Federation Ministry of Defense, answered this and other questions for us. Thus, an officer who has previously concluded a contract on performing military service in the cadres of a specific military unit or in a specific position indeed cannot be appointed to a position replacing a Colonel (Captain 1st Rank). However, there is a solution to this. With consent of the command of the military unit, the officer should abrogate the contract signed under paragraphs "b" or "c" and conclude a new contract under paragraph "a" of Part 1, Article 33, that is, on performing military service in cadres of the armed forces. Then there will no longer be any obstacles to being appointed to the position replacing a Colonel (Captain 1st Rank). If the command authorities of the

military unit on whose staff the officer belongs do not consent to concluding a new contract, naturally, there will be no promotion.

Will the years performing duties as a people's deputy and full-time work in a representative or executive body of power count towards a serviceman's years of service? Article 44 of the law does not clarify this aspect and talks only about a temporary interruption of military service in such cases...

No, it will not count. If a serviceman who is a people's deputy intends to transfer to a permanent job in a representative or executive body of power, he must be aware of the choice facing him: either serve in the armed forces or dedicate himself to political or administrative activities. Current legislation of the Russian Federation does not permit doing both simultaneously.

On completion of the period of interruption of military service, a citizen has the right to continue his service or be discharged into the reserve without any consequences. If he continues his service, calculation of years of service will resume.

Part 1 of Article 47 of the law states that a serviceman and also a citizen in the reserve or retired may be deprived of his military rank only by sentence of a court for premeditated commission of a crime. But what if he is convicted and imprisoned for an unpremeditated crime?

In such a situation, Vyacheslav Sototskiy explained, a regular serviceman may be discharged from the ranks of the armed forces, but he will retain his military rank. For example, this may occur if a serviceman is sentenced to imprisonment for a traffic violation, for operation of a transport vehicle, or for other crimes committed through carelessness.

Various aspects of criminal liability also concern readers in connection with other provisions of new laws. Most often this pertains to problems of evading military service. What punishment is envisioned for this today?

Presently, the question of liability for evasion of military service is governed by the Criminal Code of the Russian Federation, the Russian Federation Code on Administrative Offenses, and other legal acts. In particular, Article 80 of the Russian Federation Criminal Code stipulates: evasion of a scheduled induction into active military service is punishable by imprisonment for up to 5 years.

The Decree of the Supreme Soviet of the Russian Federation on the Procedure for Implementing the Russian Federation Law on Military Service Obligation and Military Service directed the government of the Russian Federation and the General Procurator of the Russian Federation by 1 April 1993 to prepare and submit for consideration of the Supreme Soviet of the Russian Federation and the president of the Russian Federation proposals on taking urgent steps aimed at preventing

evasion of military service by citizens and also desertion by servicemen. Apparently, taking into account the worsening of the problem of manpower acquisition, these proposals will provide for even harsher punishments for such offenses.

It should also be noted that officials who promote evasion of military service (say, a physician who provides fictitious information about a draftee's nonexistent illness) will be held criminally liable.

Russian Federation Supsov Decree on Military Obligations, Service

93UM0553A Moscow KRSNAYA ZVEZDA in Russian 21 May 93 p 2

[Decree of the Supreme Soviet of the Russian Federation on Certain Measures Pertaining to the Fulfillment of the Law of the Russian Federation "On Military Obligation and Military Service"]

[Text] Due to the need to regulate certain legal aspects of the fulfillment of the Law of the Russian Federation "On Military Obligation and Military Service" (VEDOMOSTI SYEZDA NARODNYKH DEPUTATOV ROSSIYSKOY FEDERATSII I VERKHOVNOGO SOVETA ROSSIYSKOY FEDERATSII, No. 9, 1993, p. 326), the Supreme Soviet of the Russian Federation hereby decrees:

1. Point 1 of the Decree of the Supreme Soviet of the Russian Federation "On Military Obligation and Military Service" is to read as follows:

"The Law of the Russian Federation 'On Military Obligation and Military Service' is to take effect as of 1 March 1993, with the following exceptions:"

"a) Paragraph 8 of the second part of Article 1, and Paragraph 3 of the first part of Article 25, which are to take effect at the time the Law of the Russian Federation 'On Alternative Service' goes into effect;

"b) Point 'd' of the first part of Article 21;

"Point 'b' of the second part of Article 21, with respect to the granting of deferments from the military draft for citizens who have reached the age of 20 years and are enrolled for the first time in full-time departments of educational institutions for primary or secondary vocational training.,

"Point 'c' of the second part of Article 21;

"Paragraph 2 of the first part of Article 35 with respect to the performance of military service by induction by citizens of states which were formerly republics of the USSR in units and subunits of the Armed Forces of the Russian Federation or the Border Troops of the Russian Federation located on the territory of the states of which these people are citizens, when bilateral interstate agreements have been concluded and ratified by the established procedure,

"which are to take effect on 1 January 1995.

"Be it established that the induction period for citizens indicated in Paragraph 4 of Point 1 of this decree is 1 to 30 June."

2. Point 5 of the Decree of the Supreme Soviet of the Russian Federation "On the Procedure for Placing Into Effect the Law of the Russian Federation 'On Military Obligation and Military Service'" is declared null.

3. Be it established that in the application of Point "b" of the second part of Article 21 of the Law of the Russian Federation "On Military Obligation and Military Service":

the term "educational institutions for vocational training" in this Law is to be understood as educational institutions for vocational training with state accreditation;

the right to a deferment from the military draft is granted for the period of the citizens study within the limits of standard periods for covering the basic educational programs established in standard statutes for state and municipal educational institutions.

4. Be it established that in the application of Point "d" of the second part of Article 21 of the Law of the Russian Federation "On Military Obligation and Military Service" the term "rural educational institution" in this Law is to be understood as a rural educational institution with state accreditation.

5. Be it established that in accordance with Paragraph 4 of Point 2 of the decree passed by the 7th Congress of People's Deputies of the Russian Federation "On the Situation in the Armed Forces and the Military Policy of the Russian Federation," citizens rendering military service in military units of the armed forces or other military formations of the USSR or the CIS before the Russian Federation assumed jurisdiction over these formations, who had signed a contract to serve in the national armies of states which were formerly republics of the USSR, retain the legal status of military personnel as provided in laws of the Russian Federation until 31 December 1999, if appropriate bilateral, interstate treaties are concluded and ratified by the established procedure.

In the case of failure to observe the provisions specified in Paragraph 1 of this point, Article 62 of the Law of the Russian Federation "On Military Obligation and Military Service" applies to these citizens.

6. Until the Statute on the Procedure for Performing Military Service is ratified and placed into effect by the established procedure, the minister of defense of the Russian Federation and the heads of other ministries and state committees of the Russian Federation in which military service is specified by law are to be granted the authority:

in accordance with the Law of the Russian Federation "On Military Obligation and Military Service," to establish the formats for contracts of military service and the procedure for concluding them;

in accordance with the fourth part of Article 48 of the Law of the Russian Federation "On Military Obligation and Military Service," to extend the military service term for military personnel with rare military occupational specialties for a period of up to 1 year but not beyond the point at which the citizens have reached the age of 60 years.

7. Be it established that in accordance with Article 12 of the Law of the Russian Federation "On Defense," and Article 48 of the Law of the Russian Federation "On Military Obligation and Military Service," servicemen who have reached the age of 60 years by 1 March 1993 (including those attached to state representative, executive or legal agencies, as well as people's deputies) are to be discharged from the military service prior to 1 July 1993.

8. Be it established that until there is legal definition of the procedure for performing military service by military personnel of military courts or with agencies of military justice, the military procuracy, field branches of the Central Bank of the Russian Federation or the State Technical Commission of the President of the Russian Federation, these military personnel are regarded as performing military service in accordance with the Law of the Russian Federation "On Military Obligation and Military Service," taking into account those specific conditions specified in Statute No. 4502-1, passed by the Supreme Soviet of the Russian Federation on 17 February 1993, for military judges serving in the armed forces of the Russian Federation and assigned by the minister of defense of the Russian Federation to a specific military court or an agency of military justice, the military procuracy, a field branch of the Central Bank of the Russian Federation or the State Technical Commission of the President of the Russian Federation when assigned to the military position by the established procedure.

Be it explained that that part of the paragraph in the first part of Article 43 of the Law of the Russian Federation "On Military Obligation and Military Service" which establishes the period of attachment and the positions of the attached personnel does not apply to these military personnel.

These military personnel sign contracts to perform military service by the procedure established for personnel of the armed forces of the Russian Federation.

9. The attention of the president of the Russian Federation and the government of the Russian Federation is directed to the need for timely implementation of the Decree of the Supreme Soviet of the Russian Federation "On Military Obligation and Military Service."

10. It is proposed that the president of the Russian Federation:

take exhaustive steps prior to 1 July 1993 to see that Paragraph 2 of the first part of Article 35 of the Law of

the Russian Federation, "On Military Obligation and Military Service," is implemented;

define prior to 1 July 1993 the procedure for reorganizing the military formations in which the Law of the Russian Federation "On Military Obligation and Military Service" does not provide for military service;

for purposes of rendering more precise the defense budget for 1993 and preparing the 1994 defense budget for consideration, submit to the Supreme Soviet of the Russian Federation prior to 1 September 1993 proposals for the composition, structure and numerical strength of the armed forces of the Russian Federation and other troops for 1 January 1994, taking actual induction reserves into account.

[Signed] Chairman of the Supreme Soviet of the Russian Federation

R.I. Khasbulatov

SUPSOV Armed Forces Subcommittee Chief on Progress of Military Bills

93UM0569A Moscow KRASNAYA ZVEZDA in Russian
22 May 93 p 2

[Interview with Aleksey Yuryevich Tsarev, chairman of the Parliament Subcommittee on the Armed Forces, by Oleg Platonov; place and date not given: "The Package of Military Laws Is Being Expanded, But Not as Quickly as We Would Like."

[Text] Five questions for the chairman of the Parliament Subcommittee on the Armed Forces, Aleksey Tsarev.

[Platonov] Aleksey Yuryevich, an impressive "military package" of Russian laws has already been passed. Moreover, there are already quite a few proposals on making changes to existing laws. So, the first question is about the plans of your subcommittee.

[Tsarev] First of all, I must tell about the preparation for submission to the Supreme Soviet of amendments to the entire block of military laws, which stem from the experience of their application.

Working groups have been created under the subcommittee for preparing for approval by the Supreme Soviet the Statute on the Procedure for Performing Military Service, general military regulations, a unified list of positions to be filled by top officers, and so forth. We understand that the troops are waiting impatiently for these documents, but, unfortunately, the draft documents have not yet been submitted by the government and president of the Russian Federation.

As far as the monitoring functions are concerned, the subcommittee is presently preparing an analysis of execution of the laws of the Russian Federation on defense and military obligation and military service by the president, the government, and the Ministry of Defense.

[Platonov] Do you have grounds for doubting the execution of these laws?

[Tsarev] Such monitoring follows from decrees of the Supreme Soviet on the procedure for implementing these laws. But there also are sufficient grounds. For example, despite the fact that the Russian Federation Law on Defense was passed in September of last year, the Council of Ministers so far, for all intents and purposes, has not begun real reorganization of military formations not specified by law into civilian structures. In particular, this involves military-construction units of civilian ministries and departments. The decision to abolish them was made back in the USSR. Presently, there is no plan for reducing these units by 31 December 1994 and reassigning the servicemen. In the end, it may happen that the reorganization will be conducted in a slipshod manner. As a result, above all, people will suffer, the state will incur material damage, and, as has happened more than once before, those responsible will not be found.

[Platonov] How do things stand with general military regulations? Here, too, there is no time to be lost...

[Tsarev] General military regulations govern relations between civilians performing military service that are associated with human rights. Therefore, they must be approved not only legislatively. On the other hand, general military regulations are oversaturated with provisions which very well could have been established by the president of the Russian Federation, the minister of defense, commanders in chief, or other officials. Hence the need to draw up one General Military Regulation of the Russian Federation, to be approved by the Supreme Soviet and compulsory for all servicemen of Russia, regardless of departmental subordination. It is not a matter for the Supreme Soviet and certainly not the president of the Russian Federation to decide how many fire extinguishers there should be and where and what kind of tags should be on them. This will be contained in other formal documents containing regulations.

[Platonov] You mentioned the unified list of positions to be filled by top officers. What does this involve?

[Tsarev] The general rank is a special military rank which, as a rule, should be conferred upon military leaders commanding large military collectives. The training of leaders of this level and their pay and allowances, including after completing military service, require considerable expenditures from the state. In addition, awarding the general rank is a sort of recognition of the distinguished service of a serviceman in the area of defense of the state. The number of general positions, intentionally or not, reflects on the structure of the army. Obtaining a general rank is the natural desire, if not of every soldier, as the well-known saying goes, the certainly of every officer who has dedicated himself to military service. It is no secret that the general rank is often awarded not for distinguished service and with violations of established procedure, which to a certain

extent discredits this high rank. Therefore, the list of general positions and the procedure for awarding general ranks in world practice are established by the supreme bodies of the state.

Such a list also existed in the USSR and was approved jointly by the CPSU Central Committee and the Council of Ministers. Today, naturally, this list is outdated and no longer corresponds to the structure and tasks of the armed forces and other troops. Presently, proposals of the ministries and departments are being considered in the State-Legal Administration, and in the near future, we hope, the president will submit a unified list to the Supreme Soviet for approval.

This list should indicate the names of the positions which can be filled by top officers and precisely what military ranks correspond to them. Besides this, the list should specify the positions to be filled by civilian personnel and female service members, and also those that will be filled only on a competitive basis. Serving in positions not included on this list, service members will not be able to receive the military rank of a top officer, especially if these service members are working in civilian organizations. Up to the present, military ranks, including general ranks, were sometimes awarded to civilians sort of as a gift. At the same time, the Supreme Soviet will establish the number of positions in the armed forces to be filled by generals and admirals.

[Platonov] The final question is about the timetable for the draft laws. Although for various reasons it may be disrupted, all the same, what drafts will be submitted for discussion of the chambers and when?

[Tsarev] Of course, we have a plan for passage of the draft laws, but it may be adjusted. Tentatively, the unified list is to be discussed in May. Additions to the Law of Russia on Defense are planned. This probably will take place in June.

After the parliament's recess, I think, the Supreme Soviet will begin consideration of the draft regulations. This, of course, is in the event that the parliament's work proceeds normally.

Impact of Civilizing Civil Defense

93UM0569B Moscow KRASNAYA ZVEZDA in Russian
19 May 93 p 2

[Article by Lt-Col Ivan Sergeyev, KRASNAYA ZVEZDA correspondent: "Under the 'Wing' of the GKChS: How Things Are for Civil Defense After Its Removal from the Armed Forces"]

[Text] Two years ago on 17 April 1991, the State Committee for Matters of Civil Defense, Emergency Situations, and Dealing with the Consequences of Natural Disasters (GKChS) was formed by edict of the chairman of the Supreme Soviet of the Russian Federation. On that day, Civil Defense was resubordinated from the armed

forces to the above-named committee. What has Civil Defense gained and what has it lost in connection with the reorganization?

The first difficulty which the leaders of Civil Defense encountered after it was no longer part of the armed forces, it turns out, was manning the Civil Defense regiments and brigades with personnel. Earlier, it was manned on the residual principle, and with the removal as part of the armed forces this has become a problem. In the last fall call-up, Civil Defense received only 300 of the young replacements towards its 6,500 requirement. During this spring call-up it needed 8,000, but received 500. How does this affect the state of combat effectiveness of the troops?

There was an accident at the Tomsk-7 Chemical Combine. The Kemerovo Civil Defense Regiment, stationed in the village of Plotnikovo and closest to the accident site, was alerted. The regiment is authorized 200 people. It has 61 soldiers and officers. They managed to move 41 people and 16 pieces of equipment to the accident site. Fortunately, in the opinion of specialists and members of the GKChS commission, the accident turned out not to be so serious and large-scale, and everything worked out without using this regiment. But what if the trouble, heaven forbid, would have been worse, then what? Count on the undermanned Civil Defense?

Let us look, in terms of industry and production, at Kemerovo Oblast, which the above-mentioned Civil Defense regiment is called upon to "rescue" in the event of industrial accidents and natural disasters. Its area is 95,700 sq km. Its population is over three million people, including urban population—about three million [sic] (which is 88 percent of the total). The oblast's production complex is represented by 574 production associations [PO] and enterprises. The chemical industry is concentrated primarily in the city of Kemerovo (Azot PO, Khimprom PO, Karbolit PO, Khimvolokno PO). A total of 140 facilities are concentrated on the territory of the oblast, many of which use highly toxic substances in production. The most common are chlorine, ammonia, nitric acid, and sulfuric acid. Highly toxic substances are also concentrated at railroad stations.

According to experts' predictions, in the event of accidents at chemically hazardous facilities involving the discharge of highly toxic substances, the area of contamination may be up to 1,300 sq km. In addition, according to experts' estimates, natural disasters associated with the extreme hydrometeorological conditions are possible in Kemerovo Oblast. These conditions include heavy snowfalls, freezing of rivers, and heavy rains, as a result of which rivers overflow their banks and a high-water situation develops. The southern areas of the oblast are a seismically dangerous zone with possible earthquake force of up to 7 points. There are 66 populated areas with a total population of 1,946,000 located on a seismically dangerous territory of 45,000 sq km.

As we already know, there are only 41 service members ready to act to combat the consequences of all these potential natural and manmade disasters. We must also consider that their level of training is by no means outstanding, since the spend practically all their time on daily detail or engage in administrative matters.

And it is not the Kemerovo Regiment alone that is in such a condition. Presently, the manning level of the Civil Defense Troops is 30 percent of the establishment, and after this spring discharge it will be only 15 percent. It is known that things are not much better with manning levels in combat units in the armed forces. But, in recognizing this, we should not forget that the likelihood of a war breaking out today is perhaps lower than the likelihood of all sorts of accidents and disasters. In particular, in order somehow to maintain the Civil Defense Troops at combat readiness, the leadership of the GKChS, with authorization of the government of Russia, has made the decision to recruit 1,300 volunteers into Civil Defense units this year. But all is not so simple here either.

"No matter how much we separate ourselves from the armed forces," says Colonel Andrey Irkliyenko, Deputy Chief of Staff for Organizational and Mobilization Affairs of the Civil Defense Troops of the Russian Federation, "there still must be coordination with the Ministry of Defense. For example, how can I man units without military commissariats? Or the fact that mobilization plans to not reach us—this is a misunderstanding. You see, in the event of war, the Civil Defense Troops will perform wartime missions for territorial defense..."

One can understand the colonel's concern: up to now there are no normative acts for coordination of troops of the Russian Army with the Civil Defense Troops. Everything is often structured on personal relations of the military district commander with the chief of the regional center, to whom the Civil Defense Troops and headquarters are subordinate. And personal relations may develop differently.

The East Siberian Regional Center is headed by Aleksandr Moskalets, the former procurator of Krasnodar Kray. During an inspection, the equipment of a Civil Defense regiment subordinate to him turned out not to be combat ready. There were no spare parts. They were located in district depots. In addition, mobilization questions had not been worked out—there was no close coordination with the district command authorities.

In short, fundamentally new solutions are needed. You see, up to now the infrastructure—logistical and technical—has remained "tied" to the military department. So, we need to look for ways of closer cooperation with it or organize independent supply services at the GKChS. It was not by chance that the recent Edict of the President of the Russian Federation on Civil Defense directs the GKChS within three months to draw up and submit for approval to the Council of Ministers-government of the Russian Federation a draft Regulation on Civil Defense Troops of the Russian Federation, which also will govern those issues mentioned here.

Nevertheless, it would be unfair to assert that removing Civil Defense from the structure of the armed forces has brought only worries and troubles. There are also positive aspects. For example, the principle of technical supply of the Civil Defense forces has radically changed. Whereas before Civil Defense received equipment that had spent its lifetime in combat units and was really suitable only for a museum, now the Civil Defense leadership is free to purchase equipment for itself independently, based on its needs and missions. The GKChS is allocating the necessary money for this. In addition, it now has the opportunity to order for itself equipment and small-scale mechanization equipment at enterprises. Incidentally, one Moscow-area enterprise recently received an order from Civil Defense for small-scale mechanization equipment: portable winches, up to 25-tonne jacks, clamps—all hydraulic. It seems that the times when the main tools for a Civil Defense soldier were a crowbar, sledgehammer, and shovel are becoming a thing of the past.

Another positive aspect is the extensive international contacts of the GKChS and Civil Defense. For example, now several motor vehicle detachments from the Civil Defense Motor Vehicle Regiment that is in the city of Noginsk are working in Yugoslavia and delivering humanitarian aid. Our lads have gave such a good accounting of themselves that the deputy supreme commissar of the UN for refugee affairs, Mr. Douglas Staffor, requested an extension of our detachments work there. The GKChS recently dispatched another column of KamAZ vehicles to Yugoslavia.

Finally, in the opinion of Colonel Irkliyenko, solving housing problems for Civil Defense officers has become more timely. The chairman of the GKChS is trying to use every opportunity to provide apartments not only for staff associates of the state committee but also Civil Defense servicemen. Just recently, three apartments for 20 million rubles each were purchased for the Civil Defense Headquarters.

INTERREGIONAL MILITARY ISSUES

Russian Army Commander in Abkhazia Gen Sorokin Profiled

93UM0436A Moscow KRASNAYA ZVEZDA in Russian
20 Mar 93 p 3

[Article by Vladimir Zhitarenko: "A General's Work"]

[Text] Recently I was again ordered to Abkhazia, to visit subunits of our troops stationed there. I had a chance to become better acquainted with the commanding general of the operational grouping there, Lt-Gen Viktor Andreyevich Sorokin. I recalled my first, November meeting with him. And also a June meeting with Maj-Gen Aleksandr Ivanovich Lebed. It is simply impossible not to connect these two figures.

Probably I was lucky, in that in June I was present at the replacement of the former commander of the 14th by Lebed, and in November I personally experienced the arrival of Sorokin at Gudauta. Later in Pridnestrovye, as is known, the new commander displayed not only bravery and resolve, but also state responsibility for his decisions. He assisted the Russian service members in shaking off their confusion and standing up for fairness, and helped the conflicting sides to come to their senses and reconcile. A little later, but on the very first day of the command of the operational group, Sorokin gave the order to return fire on positions from which the Georgian side was firing on the laboratory at Esheri, which has already become sadly famous. During this shelling I spent several days in the laboratory and I know first hand had depressing it was for the officers and men, not so much the artillery fire as the many promises of the senior officers to "take adequate measures," promises not backed up by an order to act. How the one who led the troops into Abkhazia reveled in his impunity and how he abused the local residents and annoyed the subunits of the Russian Army.

Then Sorokin gave the go-ahead for action by his subordinate artillery units, and scrambled the aviation.

A pair of ground-attack aircraft made two runs on the "Grady." A third was planned, but the pilots rejected the plan: The Georgian artillery troops had placed their self-propelled guns right next to a multi-story residential building, and however accurate the sighting equipment on the Su-25, there could not be one-hundred-percent certainty that the bombs would not damage the building. After listening to the arguments of the aviators, Sorokin had to agree. This then, about the question of the general's "cold-bloodedness."

Now about the development of further events. In December Viktor Andreyevich, after calming down the provocateurs, give up his place as commander of the grouping to another general, and went off to Moscow to perform his permanent duties as deputy commander of airborne troops. And the Georgian artillery again began to bang away at our subunit in Esheri incessantly. The

laboratory essentially was turned into ruins. In the region of Tkvarcheli, a Russian Mi-8 helicopter carrying 58 women and children evacuated from a besieged area was shot down. The version of the Georgian side: the crew of the helicopter were allegedly carrying weapons. Scarcely anyone believes that, especially since a multilateral commission, while it did find weapons on board, found only the personal weapons of the pilots. I cannot believe it either, certainly not. I flew twice with that crew, and I know that except for flour for the Tkvarcheli residents, dying of hunger, and on the return trip old people, women and children, they saw no other cargoes at all, let alone military ones.

In January Sorokin again visited Gudauta. And again they cursed him from beyond Gumista. For again he ordered that fire be returned, I stress only returned, against those who were firing their rounds at Russian service members. Those beyond Gumista would have it otherwise: that the general should put up with such attacks against the Russian side and her Army without murmur. But he could not allow this. They were confident that they could break and frighten one such as him. Sometimes it seems to me that a lot of what is happening in the region of the Abkhazo-Georgian conflict is also done in order to settle accounts with him. I shall cite some more arguments for this seemingly strange idea.

But first, about the last visit, in March.

As already mentioned, I found the laboratory at Esheri in ruins. So beaten up that the airborne battalion garrisoned there earlier had been forced to move to a different spot, because they didn't have shelter over their heads, and left only one of its companies in the basement. Of course the Georgian side claims that there was not a [small] subunit there, that it was not one but several units of the Russian Army, and they even gave the number as "more than 800 airborne troops," which also were allegedly participating in battles on the side of the Abkhazians. The lie is so obvious that Sorokin did not deign to comment on it. Just as he does not intend to comment on the accusation of other Russian journalists that our service members are not providing medical assistance to Abkhazian formations who suffered losses during recent battles at Gumista: that same company there has only one medic.

And indeed, it is not the job of a general to comment. He has a different job: to follow orders. One such order is not to abandon the laboratory at Esheri, and he will not abandon it. He gained the right to use weapons and equipment to defend our military installations in Abkhazia, to protect the lives of subordinates, and he uses them. With a handful of subordinate airborne troops and small air and air defense cover, he stood at Gudauta, Esheri and Sukhimi at his assigned positions, and he will stand to the last.

Such is his character, formed since his cadet days.

He graduated from the Ryazansk Military School "over-age"; he was almost twenty-five. But perhaps it was his

mature age which helped the lieutenant, so to speak, to jump into his carrier. By this I do not mean his service growth, for by no means did he jump past the rungs of his career ladder in Bolgrad, Afghanistan, and in Gyandzhe. For instance he commanded a division for almost four years. I am speaking of his profound perception of his place in the ranks. He was a lieutenant, and he did his job so that the company commander did not have to worry about how things were in Sorokin's platoon. In the Afghan war, commanding a regiment, he did not give cause to the division commander to worry about the problem of combat and tactical training of his subordinate officers, for that was the problem of the regimental commander, and his alone. In Gyandzhe, as the chief of a garrison, he resolved both division and so-called interethnic problems, since he was certain that there was no one who could do it better. Here in Gudauta he was forced to walk the knife-edge of interethnic relations. And if recently the Russian Minister of Defense visited the staff of the grouping, that certainly does not mean that he did not trust Sorokin, or that Sorokin was constructing those relations on the wrong principles.

Not tall, heavy-set, confident of himself and his subordinates, at first glance he gives the impression of a regular guy. Flight jacket without shoulder boards, as if to stress the unusualness of the situation in which our subunits now find themselves, in which air cover is by no means a secondary requirement of survival. But then, his love of aviation is not only emotional. In his day he graduated from an air club, and some of his subordinates will admit the secret to this correspondent, that during air transport movements Sorokin is apt to take the pilot's seat. He also tries to "take the throttle" in other situations. Can it be that the commander slipped into the very thick of events there, into the laboratory itself? He did indeed. And of course it was hit by Georgian artillery. But under the bursts he did not consider it shameful to race for the basement, thus making it clear that a general's pride in such situations, just as the soldiers, is superfluous; the main thing is to preserve his forces, to save his lives. He himself did not call in aviation in response, he left it to the commander of the airborne subunit. Perhaps that is why it took off a little late. What happened later, at the flight operations critique? The aviators, his favorites, will long remember that.

He took the artillery out of the laboratory, but in case of necessity it will reach the offenders in Sukhimi. The Georgian side assumes that the Russian tubes are in the sanatorium at Esheri, and pelt it with shells and direct their aviation there. Vain efforts, not one of Sorokin's guns has suffered. But there are victims among the civilian personnel. On 17 March alone, five civilians were killed and 16 wounded as a result of an air and artillery strike from the Georgian troops. Of course it is possible that the Georgian agitator-propagandists will present this in their own way, in a favorable light for themselves.

After the destruction of our helicopter near Tkvarcheli, Sorokin ordered that transport Mi-8s be released only

under the protection of fire-support helicopters and "choppers" of the search and rescue service. It goes without saying that the Georgian side will not allow this escort to pass to Sukhimi, where a separate airborne battalion is garrisoned; the Mi-8 must go to that airport alone. But even combat aircraft hovering at a remote point over the sea inspire confidence.

Sorokin has set up reconnaissance as it should be set up. I believe he knows as much about the intentions of the other side with respect to our troops as they do, if not more. And they cannot but suspect how much he knows. Isn't that the reason for the loud statements about the "general's machinations"? But those statements are not backed up by a single fact. While Sorokin has as many facts as you please about direct armed action against our subunits. It is not superfluous to stress that return fire is not delivered after every shelling of the laboratory, by any means. In my presence the commander of the defensive group of Russian military installations at Esheri Lt-Col Vladimir Arefyev drew on the wall of his office-cubicle the number 305, the number of Georgian shells which have already buried their noses in the laboratory. On the morning of the day when I was in the laboratory, another shell pierced the wall of the warehouse, and by evening another five had hit the barracks and the vehicle park.

Fire was not returned. Sorokin knows when it is necessary. His subordinates know it. Endurance and patience are the only weapons of the Russian subunits in Abkhazia.

And now, arguments about the fact that the other side is fighting personally against Sorokin.

Last Tuesday the general was supposed to turn over his job to his successor and head back to Moscow. Is this not why the next offensive of the Georgian troops was started up then, before it again bogged down, and the Abkhazian subunits overran Gumista in the course of the counterattack? As has already happened more than once, after suffering a failure in battles with the Abkhazians, the opposing side always blames the Russian troops for what happened, and demands their immediate withdrawal and so forth. There is another goal this pursues, in addition to all the others: to put psychological pressure on Sorokin's successor, to put him immediately "in his place."

It is not likely to succeed. This is also to Sorokin's credit: his did his job, and gave a lesson in inflexibility and firmness in defending the interests of Russia and the honor of our army to his successor general and every officer and soldier.

In response to my request to photograph Viktor Andreyevich, he answered something to the effect that he didn't fit the film star image, and said we would be better to take a picture of a young soldier. And that is what I did: the photo shows Lt Aleksey Boyarshinov. When special troops of Georgia, armed to the teeth, approached the garrison point of his subunit, the lieutenant went out to meet them unarmed. And in a

man-to-man talk he convinced them that it was inappropriate for them to invite his retaliatory measures. With that they parted. The lieutenant now has lieutenant's work.

Some Russian Officers in FSU Armies Blocked From Return to Russia

93UM0553C Moscow KRASNAYA ZVEZDA in Russian
29 Apr 93 p 1

[Article by Colonel Sergey Nikitin, Main Directorate for Personnel Training and Placement of the Ministry of Defense of the Russian Federation, and Col Nikolay Poroskov, KRASNAYA ZVEZDA correspondent: "Russian Officers in the National Armies: The Choice Is Theirs"]

[Text] By fate and as a result of ill-conceived political decisions a large number of Russian officers have been left in the so-called "adjacent foreign parts": some of them in military formations of the Russian Federation's armed forces stationed there under bilateral state treaties; others in units or formations or at installations of the former armed forces of the USSR which were taken under jurisdiction by the sovereign states. The Civil Defense Command was transferred to the Commonwealth states even before that.

Clearly, the transfer of some structure is one thing, but transferring specific people in that structure is quite another. No one asked what the servicemen wanted, however. The lot of Russian officers who all at once found themselves in another country and another army, to which they did not take an oath, is not an enviable one. It is tragic for some. The growth of national self-awareness—not a bad thing in and of itself—in many cases flares up as primitive national animosity. The officers experience this personally and write letters to various authorities and to KRASNAYA ZVEZDA.

Many of them ask themselves: Who am I? Why am I here? How much is my service affecting the defense capability of my homeland, Russia? It is difficult also to say unequivocally what the status of the Russian serviceman is in the former republics of the USSR.

There has been a drastic deterioration in the supply of everything essential to life and service in the subunits, a shortage of replenishments—both officers and enlisted men—is making itself felt, the subunits are attacked by organized gangs, and the officers lose both their military and civilian property. In the national armies preference is given to their own, "native" personnel for promotions. The newspaper has received letters about this from various regions of the adjacent foreign parts from O. Zhukovskiy, V. Zuzi, S. Khvostishkov, I. Yatskiy, S. Pyzhov and the wife of officer K. Kudalin.

All of this taken together is forcing Russian servicemen to request transfers. These requests are frequently cries from the soul. They are prepared to serve in the Far North, on Sakhalin, anywhere as long as it is in Russia.

The military leadership in the sovereign states frequently make this stipulation, however: Either serve here or receive a dishonorable discharge. They do not pay severance pay upon discharge and do not issue privatization checks. To some extent one can understand them. Their armed forces are thinly manned with national officer cadres, and the drastic drain of officers is very detrimental for an army. That does not make things any easier for the Russians, though. This is why some of them—and the number keeps increasing—find their way out of the situation by accepting discharge "under their terms" or going to fight at some hot spot. At least the pay is decent there. In reply to such letters the authors receive the advice not to do anything rash, to operate within the law. What law? In the legal respect can the officer rely on?

With respect to servicemen of the Russian Federation's armed forces, their transfer and replacement are conducted in accordance with the laws of the Russian Federation and regulations of the Ministry of Defense. The procedure for transferring Russians serving in the national armies due to circumstances, who have expressed a desire to serve in the Russian army is defined in bilateral agreements on the performance of military service between the defense ministries of Russia, on the one hand, and Belarus, Kazakhstan, Moldova, Uzbekistan and Ukraine, on the other. Preparations are underway for similar agreements with the ministries of defense of other Commonwealth states.

In addition to this, the reciprocal transfer of servicemen of the armed forces of the Commonwealth nations is regulated by a decision adopted by the Council of Ministers of Defense of the CIS countries on 3 September 1992. It was signed by leaders of defense ministries and state committees of Azerbaijan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan. In accordance with this document transfers and TDY assignments to the Russian Federation's armed forces are made by decision of the minister of defense of the state in which the officer is serving—upon receiving consent or an inquiry from the Russian side.

What is it like on the practical level for a serviceman who wants to transfer to the Russian army? He has to contact the personnel organization of the branch of Russia's forces or the district in the forces of which he wishes to serve. If there is a slot open, the national ministry of defense will be sent an inquiry. If there are no vacant positions, the serviceman will be offered alternative stations.

Remember that when they signed the bilateral agreement or the multilateral decision of 3 September 1992, the ministries of defense of the Commonwealth nations committed themselves not to apply any pressure whatsoever upon servicemen desiring to transfer to the armed forces of another country and not to permit infringements of their rights and liberties. If problems with a transfer arise, the officer should notify the personnel organization of the military district, the branch of armed

forces or the Main Directorate of Personnel Training and Placement (Moscow, K-160).

Now, about the discharge of Russian military personnel from the national armies into Russia. This procedure is also stipulated in the aforementioned bilateral agreements, in which the ministries of defense committed themselves not to interfere with the servicemen in their choice of where they will live following discharge. It too is conducted by decision of the minister of defense of the state in the armed formations of which the officers and warrant officers are serving. The servicemen are taken off the personnel roster and sent off to their chosen place of residence after they have completely cleared the base where they are stationed.

In addition to the aforementioned documents, military personnel who are citizens of the Russian Federation who ended up in the armies of countries in adjacent foreign parts can defend their rights on the basis of Point 2 of the decision adopted at the 7th Congress of People's Deputies of the Russian Federation and Article 52 of the Law of the Russian Federation "On Military Obligation and Military Service." The actions of the servicemen may not and must not conflict with the laws of the states on the territories of which they are serving.

It would be reasonable to hope that the military departments of states which have chosen the democratic path of development and are proceeding within the framework of international human rights agreements would not hamper Russian servicemen in the realization of their choice.

BELARUS

Minister of Defense Churkin on Belarus Military Doctrine

93UM0490A Minsk BELORUSSKAYA NIVA in Russian
26 Mar 93 p 5

[Editorial: "A 100,000-Man Army Will Protect Belarus, They Believe at the Republic's Ministry of Defense"]

[Text] Today, an independent state must have its own armed forces—one of the guarantees of its existence and development. The problem of creating armed forces is complex and is not solved at one sitting. The recent breakup of the Soviet Union only aggravated the depth and complexity of the numerous problems which the Republic of Belarus will have to resolve in the very near future.

The Belarusian Military District that existed in the past on the territory of the republic was oversaturated with servicemen, equipment, and weapons of mass destruction. The military doctrine of the Republic of Belarus, based on principles of a neutral nuclearfree state, assumes that we have no enemies and the establishment of good-neighbor relations with all countries without exception. Hence, the reasonable limit of sufficiency of

the Armed Forces of Belarus is up to 100,000 men and the necessary amount of modern equipment to repel a possible threat, should it arise.

That is what Major-General N.P. Churkin, chief of the Main Staff of the Armed Forces and first deputy minister of defense of the Republic of Belarus, said at a briefing for Belarusian and foreign journalists. Today, when powerful means of destruction have been created, war cannot be considered a method of resolving disputes or other problems. One need only to recall long-suffering Afghanistan with the tremendous destruction there and the death of many peace-loving citizens not involved in the military operations.

At the same time, the armed forces are no place for political intrigues and achievement of one's goals by politicians and corrupt politicians. The Yugoslav conflict could have been prevented or stopped at the very beginning if efforts had been undertaken by the entire Yugoslav society. In the general's opinion a small state lagging behind other countries in economic development might become a source of threat.

It costs any state a considerable amount of money to maintain an army. In spite of this, the Republic of Belarus is unfailingly observing treaties concluded earlier, including the Treaty on Strategic Offensive Arms. At the same time, the armed forces are being reduced and excess equipment is being eliminated, although these are lengthy processes and everything cannot be done immediately. Moreover, less still does not mean better: new, progressive technologies and new military equipment up to the mark of the best world models are needed for organizational development of the republic's armed forces. Considerable funds will also be required to relocate Russian troops temporarily located on the territory of the republic, erecting housing for servicemen, and resolving a number of other problems. As before, Belarusian officers continue to serve in "hot spots," although the Ministry of Defense is doing everything it can to return them home.

The military doctrine of the Republic of Belarus found understanding at the NATO Headquarters in Brussels, when General N.P. Churkin once made an official visit there. Organizational development of the armed forces of an independent state must not be done at the detriment of development of its economy.

The Ministry of Defense of the Republic of Belarus considers it necessary and useful to strengthen the system of collective security of the Commonwealth of Independent States, which will be a major contribution to strengthening European-wide security and will make today's world more predictable and stable.

In conclusion, the first deputy minister of defense of the Republic of Belarus fielded numerous questions from the journalists.

MOLDOVA

Deputy Commissar on Military Service, Spring Draft
934K1176A Chisinau MOLODEZH MOLDOVY
in Russian No 15, 23 Apr 93 p 3

[Interview with Colonel V. Zavgorodniy, deputy military commissar of the Republic of Moldova, by V. Visloguzov; place and date not given: "Springtime. Fancy Turns to Love...and the Army Draft"]

[Text] Our correspondent talks with Colonel Vitaliy Zavgorodniy, deputy military commissar of the Republic of Moldova and deputy of parliament

[Visloguzov] At present one hears with increasing frequency that such a small and economically weak republic as ours has no need for its own army. That is said for the most part by civilians but what is the view of a military professional with regard to this?

[Zavgorodniy] When the Declaration of Independence of the Republic of Moldova was adopted it stipulated that we consider ourselves a demilitarized zone. It is true, history did offer us a chance to create a state without armed forces. But later, as commonly known, the situation gradually heated up and deputies were compelled to adopt four laws pertaining to the armed forces.

First it is necessary to comprehend two factors. The economic one—can we afford to maintain an armed forces or not. The political one—are they even needed or not. A gap developed in our case between the desire and the need.

Various figures were cited regarding the size of the national army. At first 20,000, then 14,000, now it appears the shift was made to a figure of 10,000. The question here is what functions can we assign it. As an attribute of the state? For that purpose it is possible to have one exemplary regiment. If we assign certain missions in the defense of the republic to the armed forces, then it is necessary to make precise calculations.

After all at present no one would be able to determine the level of adequate defense. How can it be determined since a conditional enemy is required for that. Romania cannot be an enemy, that is certain, nor can Ukraine. In addition to that in order to oppose such neighbors we need the kind of armed forces we cannot have even theoretically. Therefore our army, in the size which we are capable of maintaining, can only record an act of aggression.

On the other hand, however, the disintegration of the armed forces will hit the officers and warrant officers the hardest. That is, if we fold the armed forces it is first necessary to show some concern for that group which will be simply thrown out into the street. It is, after all, possible to create some courses for retraining of personnel, then assist them with job placement. None of that exists—while the cutbacks continue.

Another factor. The law on the armed forces states that the army is designed to ensure external security and territorial integrity of the republic. To dissolve the armed forces under presently existing conditions of a "divided" Moldova, let us put it this way, would be unwise. In other words, in my opinion as a military individual, we need the armed forces today.

[Visloguzov] Is it true that a situation has developed in the republic where there are more draft-age youth than necessary for the needs of the national army, that is, there is a surplus of those eligible for the draft?

[Zavgorodniy] It is necessary to approach that question from several sides—yes, we could staff our army three or four times over. With regard to quality of draftees, however, we have a shortage of people. After all exceptionally healthy, literate, and well-trained draftees are needed. We have a serious shortage of just such people.

In the past there used to be basic military training in the schools. Good or bad, with its many shortcomings, it nevertheless managed to do the job. Now, however, we take a draftee and get zero. In the past at least he knew about the assault rifle and had a little knowledge about military service. There used to be open door days at the units but now, however, the youths get information from newspapers and television which consists of antiquated data and ridicule. But this is not what is most important in military service. As far as the NVP [initial military training] is concerned its goal, after all, is not militarization of society but preparation of youth for life as adults both physically and morally, even if some do not join the army. If he is able to defend himself and his girlfriend even that would mean he did not waste his time training.

[Visloguzov] What is new in the spring draft which has started?

[Zavgorodniy] What is most important is that demands concerning the physical condition of the draftees have been made more rigid. In the past there existed a very long list of diseases which did not keep individuals out of the army, now, however, that is no longer so.

Formerly we used to send troops for service over the entire territory of the Soviet Union, whereas at present our young men serve within the boundaries of the republic. Now we are bringing the place of service closer to the place of residence to an even greater degree. That is subunits of the military garrison may consist of young men residing in the immediate area. Of course that does not signify that a resident of Chisinau has to serve in the capital, but at any rate he will not be serving far from it. In my personal opinion, however, the further away he serves from his parents the better. Even if we take a look at our 2nd Motorized Infantry Brigade based in Chisinau, for instance, just look what takes place there on

weekends. Seems as if each day off is Easter—there are crowds of parents with trunkfuls of food products.

[Visloguzov] What about the plans to decrease service to one year and raise the call-up age to 20?

[Zavgorodniy] As a deputy in parliament I am currently systematizing changes in the law pertaining to the army. We are incorporating in it the proposal concerning call-up at 20 years of age. If we decrease the term of active duty to one year, then it will be necessary to shift over to a contractual basis.

In that case military personnel in the basic military occupational specialties: mechanics-drivers, operators-gun layers, and technicians must serve under contract for a minimum of three years and if desired the contract may be extended. Then for the other categories, simply put, those engaged in ancillary services, one-year service will be quite sufficient. But as long as there are no changes in the legislation nothing like that will be possible.

Presently it will be necessary to discharge those who have served 1.5 years and draft replacements for them numbering about 3,000. Somewhat more, approximately 4,000-5,000 individuals, will be needed as replacements

in the carbineers because of a shortfall last year. Another 2,000-2,500 will be called up for service with the border troops.

[Visloguzov] Is it possible for residents of the Dniester Region to join the national army or, on the contrary, for a Chisinau resident to sign up with the PMR [Dniester Moldovan Republic] guards?

[Zavgorodniy] Call-up is conducted at the place of residence, but those young people "from the other side," wishing to serve in the national army, will encounter no difficulties. The problem consists of something else—those who do not wish to serve "there," i.e. those who leave a military unit on their own and come here. We discharge them, even though they were not called up here. That is, remaining as deserters in the Dniester Region the young men can either continue serving here, or are discharged and take care of their future on their own.

There are reverse cases as well, however, let us put it this way, when draftees on the right bank desert from their places of service and appear among the Dniester Region guards.

ARMS TRADE

1L219 'Zoopark-1' Radar Offered for Sale

93UM0501A Moscow *TEKHNICA I VOORUZHENIYE*
in Russian No 1, Jan 93 pp 14-15

[Unattributed article: "Missile and artillery 1L219 'Zoopark-1' Surveillance"]

[Text] A radar station with a phased antenna array, mounted on the undercarriage of an MT-LBu all-purpose light-armored prime mover.

The 1L219 ("Zoopark-1") missile and artillery position surveillance radar system makes it possible to determine with great effectiveness the coordinates of the firing positions of mortars, artillery systems and tactical missiles, as well as multiple-launch rocket systems (RSZO).

The handling capacity of the system is 18 targets (trajectories) per minute, with the simultaneous tracking of up to four targets.

The surveillance range for mortars is 15 kilometers, for guns 10 km and for RSZOs 20 km.

The average error in the determination of coordinates is 30 meters.

The deployment time is five minutes.

It has a crew of five.

The 1L219 system is superior in capabilities to the American AN/TPQ-36.

Address for inquiries: 113321, city of Moscow, Ovchinnikovskaya Nab., 18/1, Oboroneksport. Telephone (7-095) 231-00-49; telex 411-428; fax (7-095) 233-02-72, 233-18-13.

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1K123 Fire Detection System for 'Smerch' Multiple Launcher

93UM0501B Moscow *TEKHNICA I VOORUZHENIYE*
in Russian No 1, Jan 93 p 33

[Unattributed article: "The Automated System 1K123"]

[Text] The 1K123 automated system is intended for the command and control of artillery units armed with the Smerch 300mm long-range multiple-launch rocket system (9K58).

The 1K123 system is not inferior to the analogous American Tacfire system, and is several times better than it according to a number of measures, especially the time to prepare for combat operations and the relay of commands.

The 1K123 system includes the command-and-control system of the command post of the artillery unit—two command-staff vehicles (commander and chief of staff),

the command and staff vehicles of the battalion commander (up to three) and the battery commanders (up to 18).

The communications range supported by the radio sets in the command-staff vehicles are up to 50 km when stationary and 25 km in motion in the ultrashort waveband, and up to 350 km when stationary and up to 50 km in motion in the shortwave band. The undercarriage of the command-staff vehicles is the KamAZ-4310 truckbed with the K4310 van body.

For additional information, requests or proposals you may contact the address Moscow, Gogolevskiy Bulvar, 21, the Spetsvneshtekhnika State Foreign-Economic Company for the Export and Import of Arms and Military hardware. Telephone (095) 202-66-03, 201-98-07; fax (095) 230-23-91, 203-29-88.

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U.S. Arms Development System

93UM0501C Moscow *TEKHNICA I VOORUZHENIYE*
in Russian No 1, Jan 93 pp 34-36

[Article by Captain 1st Rank V. Pankov and Colonel (Reserve) B. Polikarpov under the rubric "Status, Problems, Prospects": "Arms Development in the U.S. Army"]

[Text] The foreign press reports that a fundamental turnaround occurred in the development of the U.S. Armed Forces at the end of the 1970s, when the country's Defense Department made a transition, in the definition of American experts, from an extensive to an intensive path of development. The principal aim therein was raising the effectiveness of combat operations of the army in the face of cutbacks in the time frames for the development of new models and systems of arms, as well as reductions in the financial and material expenditures required for that development. The principle of development according to end result was made inherent in the new approach, with the primary aim the performance of the assigned military tasks and the means of achieving them—that is, the creation of the means of warfare—secondary. The fact that the intensive path of development, presupposing the achievement of goals in the shortest times with the maximum economy of resources, requires new—and, as a rule, non-traditional—methods of solution that are based on the use of the most modern scientific discoveries and the latest technologies was taken as the point of departure.

The development of the armed forces in the United States today proceeds based on principles of ensuring national security that are developed by the country's higher military-political leadership and are passed on to the Secretary of Defense. The Joint Chiefs of Staff, in accordance with that document, conducts short-term (3—5 years), medium-term (7—10 years) and long-term (15 years) strategic planning. The aim of that is the

simultaneous and uninterrupted elaboration of the main military tasks, and the components and elements of them, that the armed forces of the United States will be able to accomplish within the indicated time periods.

The planning process in the realm of arms development is accomplished under the supervision of the Deputy Secretary of Defense for Procurement within the framework of the unified "Planning, Programming and Budget Distribution" (PPB) program. Other directorates of the department and the commands and directorates of the armed forces also take part in it. Scientific-research organizations and civilian scientific institutions are also involved in the preliminary study of the solutions. They prepare programs for research and the creation of prototypes of arms, and the allocated amounts of appropriations are distributed and the performance of the work and management of the realization of its results are also organized.

The PPB system includes ten main programs. Nine of them (1—5 and 7—10) are program support for the activity of the armed forces, including the procurement (series production) of weapons systems and their distribution among the troops.

The sixth main program is called "Research, Development and Realization of Existing and New Technologies." It combines and systematizes all of the scientific-research and experimental-design work necessary to accomplish the assigned military tasks. Two stages may be singled out in the process of arms development by the army in accordance with it. The first is the advance preparation of scientific and technical development, called the "Development of the Scientific and Technical Base," with a regard for long-term strategic planning. The second is the development of experimental prototypes proceeding from the medium-range tasks and based on the technologies created in the first stage. All of these measures are divided into budget categories describing certain ultimate goals: 6.1 is basic research; 6.2 is exploratory elaboration; 6.3 is experimental research; 6.4 is engineering projects; 6.5 is research on leadership and support; and, 6.6 is work to upgrade existing weapons systems.

The basic research is directed toward obtaining new knowledge in the realm of the natural sciences and the solution of theoretical problems. Specialists feel that this activity has priority significance, since it entails the appearance of new and non-traditional forms of warfare. Their opinion is that it is namely the results of basic research that determine the effective ways of developing the armed forces and the types of future weapons. The quantity of research under category 6.1 is the greatest. It is, by and large, of a theoretical nature. Some 1.5 to 4 percent of the budget of the whole program goes to it.

The exploratory elaboration is based on developing the results of the research in category 6.1. It is directed toward devising ways of realizing the theoretical research for the creation of new technologies. The latter is in turn

used to seek out materials with qualitatively new properties, as well as elements, devices and systems that possess fundamentally new capabilities. Those of all the technologies that turn out to be an order of magnitude higher than traditional ones and possess the maximum effectiveness in solving the tasks posed are then singled out. They are declared to be "critical," and are transferred annually to the Department of Defense and the branches of the armed forces for priority utilization in the creation of arms. There were 17 "critical military technologies" selected by the Scientific Council of the U.S. Department of Defense in 1982, and about 150 in 1985. The technologies that do not end up among the "critical" ones are transferred to the civilian sector. A special body created within the apparatus of the Deputy Secretary for Procurements is occupied with this issue.

The Department of Defense, by requirement of the U.S. Congress, since 1988 has annually submitted a list of about 20 priority areas in the realms of science and technology that are keys to the long-term development of the armed forces. A special group on research and prospective technologies has been created within the U.S. Department of Defense apparatus. Various scientific organizations, both military and civilian, are involved. There were 21 "critical" areas in the development of the scientific and technical base approved in 1989 (for example, improving integrated circuits for microelectronics, artificial intelligence, super-sensitive radars, high-power SHF emissions sources, new materials, high-temperature superconductivity and biotechnology, among others).

The long-term work includes work on creating new weapons systems based on the comprehensive utilization of "critical military technologies." Experimental mock-ups of functional elements and assemblies that give the weaponry new properties or substantially improve its characteristics are created, as a rule, in the course of their fulfillment. Work under category 6.3A concludes with the experimental verification of the impact that has been achieved with the mock-up. The projects selected for further utilization are officially called "innovations."

The direct creation of prototypes and arms systems based on "critical military technologies" and "innovations" is the second stage in the development of the U.S. armed forces. It is oriented toward the tasks of medium-term strategic planning. The measures in it, within the framework of the main program, are subdivided into two categories—experimental elaboration (6.3B) and technical elaboration (6.4). Experimental prototypes of the arms based on the new technologies and the "innovations" are created in the course of the work under category 6.3B. They then undergo comprehensive check-out and, as a rule, are subjected to demonstration testing. The best of those are selected as the foundation for the design engineering of the experimental prototype or the arms system. Documentation for an item created for series production is prepared in the concluding stage. The prototypes themselves, figuratively speaking, are "put on the shelf." The military leadership selects a weapons prototype and orders

it from industry for series manufacture on a competitive basis, depending on the military-political situation and proceeding from short-term military tasks, as well as taking into account the amount of budgetary appropriations for arms procurements. Some of the experimental prototypes, as we have noted, remain unneeded for a quite prolonged period. These include, for example, the neutron and vacuum weapons and the Assault Breaker tank-attack defense system, among others, that were developed in the 1970s-80s.

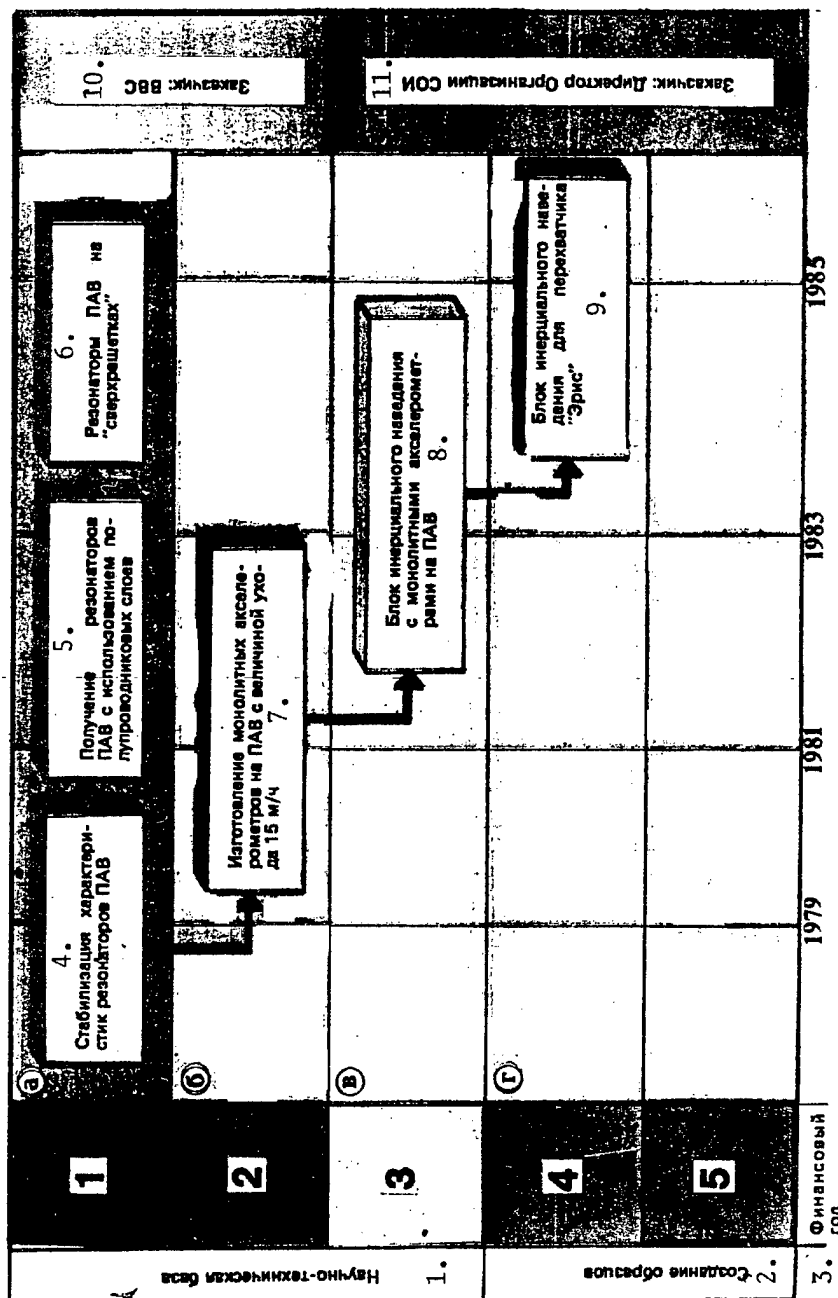
Section 6.5 comprises research aimed at creating and substantiating decisions made by the leadership of the U.S. Department of Defense and the branches of the armed forces within the framework of the strategic planning of troop development, as well as in planning, programming and budget distribution for the production of arms systems. Major civilian scientific organizations and firms are widely involved in this work (the Institute of Defense Problems, the RAND Corporation, Harvard University and the Hudson Institute, among others, for example). The upgrading of arms and military hardware envisages seeking out ways of utilizing the "innovations" that were realized within the framework of the development of the scientific and technical base in existing weapons systems. This makes it possible to increase their effectiveness considerably with relatively low spending.

All of the research under the sixth (main) program is systematized and combined according to categories of work, program elements, projects and contracts (see figure). The program element includes all the research in one category aimed at the solution of a major problem connected with the accomplishment of several military tasks. The project, being a part of the program element, makes it possible to solve some of the problems that are conditioned by one military task. The contract is a constituent element of the project. It is an agreement for specific work between the customer (the Department of

Defense) and the executor (a scientific organization or industrial firm) that is awarded, as a rule, on a competitive basis. According to program element 62301E, for example, new technologies are being created that are associated with accomplishing strategic tasks of the U.S. armed forces. It includes the following projects: ST-5—technologies for hypersonic aircraft; ST-9—technologies for strategic laser communications with submarines; ST-10—technologies for intelligent systems for strategic purposes; and, ST-12—technologies for quantum electro-optics. The ST-9 project has several contracts. Contract N00039-82-C-0141 in particular combines developments in the realm of nuclear- and solar-power systems for satellite laser communications with submarines. The customer is the Ocean Systems Center of the U.S. Navy, and the executor is the firm of General Electric.

The principles for the administration of research and development that have been realized in the sixth program, in the opinion of foreign specialists, have made it possible for the U.S. Department of Defense to convert in practice to the intensive development of arms. A linkage of research and development with military tasks is assured therein, and an opportunity appears to realize the tenet of "development according to end result" in all subsequent stages of the creation of weaponry. They feel that the existing organization of research on the development of the scientific and technical base will provide for a concentration of the efforts of science on achievements that could become priorities not only for an individual sector or one type of arms, but also for the development of means of warfare as a whole. Furthermore, and of no small importance, the time for adopting the results of research into the practice of developing new weapons systems is markedly reduced under this approach.

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Schedule of operations in the creation of a system for the vectoring of a non-nuclear interceptor for SDI: 1, 2, 3, 4, 5—categories of work 6.1 (basic research), 6.2 (exploratory elaboration), 6.3A (long-term elaboration), 6.3B (experimental elaboration) and 6.4 (technical elaboration); a—research on increasing the quality and stability of the characteristics of the resonators using the effect of surface acoustic waves (PAV); b—elaboration of technologies; c—creation of mock-ups; d—experimental elaboration.

Key:

1. scientific and technical base
2. creation of prototypes
3. fiscal year
4. stabilization of characteristics of PAV resonators
5. obtaining PAV resonators using semiconductor layers
6. PAV resonators using "superlattices"
7. manufacture of monolithic accelerometers using PAV with a drift magnitude of 15 meters/hour
8. inertial-vectoring unit with monolithic accelerometers using PAV
9. Eris inertial-vectoring unit for interceptor
10. customer: Air Force
11. customer: SDI organization director

Degtyarev Offers 14.5-mm Auto Loading Gun
93UM0501D Moscow TEKHNICA I VOORUZHENIYE
in Russian No 1, Jan 93 p 42

[Unattributed article: "Production of the State Enterprise 'Plant Named after V.A. Degtyarev'"]

[Text] The 2x35 inserted self-loading cannon from the Plant imeni V.A. Degtyarev is intended for firing and target practice for artillery systems when training gun teams and crews of tanks and self-propelled artillery systems without the expenditure of basic munitions.

| Basic Characteristics | |
|--|------|
| Caliber, mm | 14.5 |
| Initial velocity, m/sec | 980 |
| Time to install in basic system, minutes | 10 |
| Charger capacity, rounds | 6 |
| Weight, kg, not more than | 29 |

| Characteristics | Standard Shturm | Shturm variation 1 | Shturm variation 2 | HOT, HOT-2 | TOW, TOW-2 | Hellfire |
|--|---|--------------------|--------------------|--|--|---------------------------------------|
| Caliber of missile, mm | 130 | 130 | 130 | 136 | 152 | 178 |
| Weight of missile in transport/launch canister, kg | 46.5 | 49.5 | 57 | 31.9 | 28.1 | — |
| Weight of missile in flight, kg | 31.4 | 33.5 | 40 | 25.4 | 21.5 | 43—45.8 |
| Armor penetration, mm | 560—600 | 900—950 | 900—950 | 750—950 | 620—920 | 600—1090 |
| Weight of warhead, kg | 5.3 | 7.4 | 7.4 | 6.0 | 3.6—5.9 | 13.6—11.3 |
| Firing range: | | | | | | |
| —minimum, meters | 400 | 400 | 400 | 75 | 65 | 600 |
| —maximum, meters | 5,000 | 6,000 | 7,000 | 4,000 | 3,750 | 7,000 |
| Flying time to target, seconds: | | | | | | |
| —3,000 meters | 7.5 | 7.7 | 8.3 | 13 | 15 | subsonic speed |
| —4,000 meters | 10.7 | 10.75 | 11.25 | 16.5 | 20 | subsonic speed |
| —5,000 meters | 14.5 | 14.5 | 14.5 | — | — | subsonic speed |
| Control system | semi-automatic with command transmission by radio lines | | | semi-automatic with command transmission by wire | semi-automatic with command transmission by wire | semi-automatic with laser homing head |

All of the new technical solutions inherent in the missile have been certified through bench tests, and individual parameters have been checked out in flight testing.

The Russians are prepared to consider the question of completing projects for the creation of the module and upgrading the missile for series production in accordance

601904, city of Kirov, Vladimir Oblast, Ulitsa Truda, 4, ZiD State Enterprise. Telephone 9-19-27, 3-26-91; fax 5-35-64; teletype 218207 "Voskhod"

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'Shturm' SP Anti-Tank System From Kolomna
93UM0501E Moscow TEKHNICA I VOORUZHENIYE
in Russian No 1, Jan 93 pp 42-43

[Text] The modernized SHTURM self-propelled anti-tank system is being offered [for sale].

It has a modular design, so that it can be accommodated both on BMP type platforms and tanks of either Russian manufacture or those of any country buying the system.

One can create free-standing firing positions using the SHTURM that increase antitank defenses considerably.

Increased combat effectiveness for the module can be achieved by upgrading the guided missile and increasing its range and armor penetration. Variations of the upgraded missile are presented in the table.

with customer requirements. The term for the completion of the work is not more than two years.

140402, city of Kolomna, Moscow Oblast, Okskiy Prospekt, 42, Machine-Building Design Bureau.

Telephone: (8-261) 3-75-05, 3-74-06.

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Degtyarev's Multibarreled Rocket-Propelled Grenade Launcher

93UM0501F Moscow *TEKHNIKA I VOORUZHENIYE* in Russian No 1, Jan 93 p 43

[Unattributed article: "Production of Government Enterprise imeni V.A. Degtyarev"]

[Text] The MRG-1 multi-barreled grenade launcher from the Plant imeni V.A. Degtyarev State Enterprise is intended for the protection of ships and other objects against underwater commandos. It is mounted on submarines, patrol craft, auxiliary vessels and shore facilities.

Technical Specifications

| | |
|--|--------------------|
| Caliber, mm | 55 |
| Number of barrels | 7 |
| Angle of elevation | from -30° to +45° |
| Deflection angle | plus or minus 180° |
| Firing range, meters | 50—500 |
| Depth of actuation of rocket grenade, meters | 15; 30 |

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Administrative Structure of United States Arms Exports

93UM0501G Moscow *TEKHNIKA I VOORUZHENIYE* in Russian No 1, Jan 93 pp 36-37

[Article by Institute of the United States and Canada of the Russian Academy of Sciences associate A. Kurasov: "The Administrative Structure of Arms Exports in the United States"]

[Text] One may hypothetically divide the American system for managing arms exports into three interconnected systems—legislative, administrative-management and monitoring of the process of export management. The legislative is the whole set of standard documents that establishes the legal and executive responsibility of governmental and commercial structures, contains the rules for making decisions and defines the procedure for sale and the monitoring of arms exports. They also contain the basic criteria and legal conditions to which every trade deal should conform.

The administrative-management system is a quite complex hierarchical structure of state bodies with legally stipulated regulations of subordination, functioning and sequence of interaction. The process of arms export management is monitored by Congress on the basis of the legislation that affirms that monitoring.

The principal legislation of the United States governing the sale of arms abroad is the "Regulations for International Weapons Deliveries," which is contained in the Federal Code, the "International Assistance Act on Issues of Security and Monitoring Weapons Exports,"

which was adopted in 1976, and the Law on Assistance to Foreign Nations that went into effect in 1961 (with subsequent changes), as well as a law regulating exports from 1979. This latter, with corrections and amendments adopted in 1985 and 1988, is the foundation of the system of export regulation of arms deliveries that is in effect today. Regulations for monitoring commercial export shipments of goods and technologies have been developed on the basis of it.

The United States, according to legislation, distinguishes among commercial deliveries, foreign military deliveries and programs of military aid being implemented at the international level. They are all monitored by Congress. The commercial deliveries are made by the manufacturing firm, for which it should have a license from the State Department. Small lots of weapons are usually sold according to this approach. The funds for the program of military aid, as well as credits for other nations to pay for deliveries under a program for foreign military assistance, are allocated within the framework of the military budget approved by Congress.

The principal administrative responsibility for monitoring arms exports and supervising the country's policy in this realm is entrusted to the President of the United States. The Export Regulation Law gives him the right to ban or halt the sale of any good. The law of 1961, as well as a number of executive orders of the President, have delegated some of the responsibility for supervising weapons deliveries to the Secretary of State. The question of some particular deal is passed on for the consideration of the President in practice only when serious differences of opinion exist among executive bodies or the deal is of a particularly major nature. The President determines the specific types of military hardware and military services that constitute the United States Munitions List. Authority to compile it is also delegated to the State Department, which in turn should coordinate that list with the Secretary of Defense.

The department also has the right to grant licenses, and all deliveries, regardless of type, have to be approved by it. The Center for Defense Trade was created at the department at the beginning of 1990, with the aim of bringing order to the issue of permission for the sale of weapons and tightening the regimen for monitoring exports of them, and bears direct responsibility for the management of this process (but is not concerned with dual-purpose goods and technologies). They consider about 45,000 proposals every year, and permission to issue a license is obtained in 90—92 percent of the cases. The center consists of the Office of Defense Trade Controls and the Office of Defense Trade Policy. The former issues licenses for exports, as well as certificates of the observance of technical specifications. The latter determines the political expediency of cooperating with

Fig. 1. Decision-making process for commercial deliveries, according to materials in the foreign press

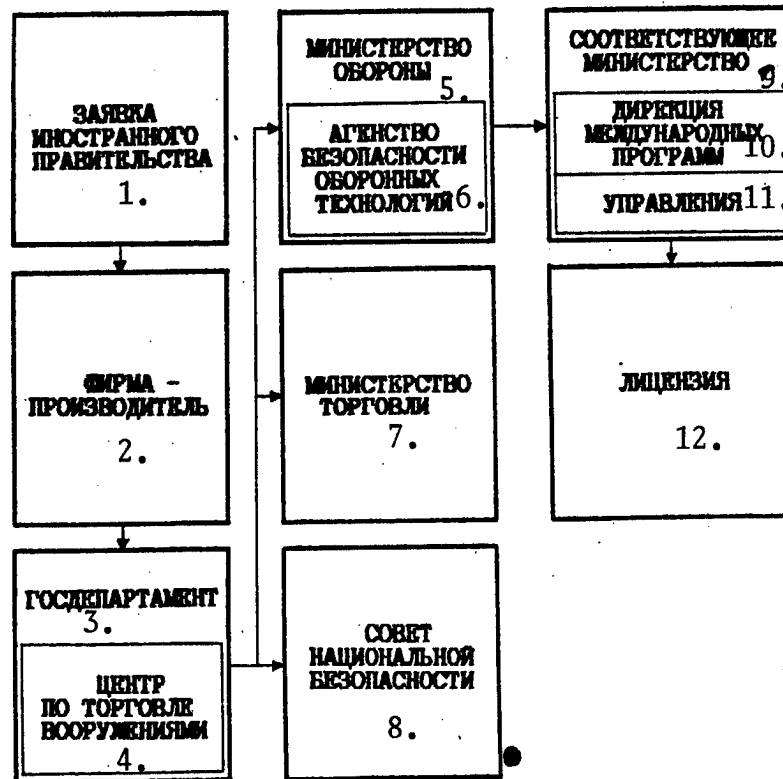


Рис.1. Процесс принятия решений при коммерческих поставках. По материалам иностранной печати.

Key:

- | | |
|---|---|
| 1. application of foreign government | 7. Department of Commerce |
| 2. producing firm | 8. National Security Council |
| 3. State Department | 9. corresponding department |
| 4. Center for Defense Trade | 10. directors of international programs |
| 5. Department of Defense | 11. directorates |
| 6. Defense Technologies Security Agency | 12. license |

other countries in matters of the joint production of various types of weapons and the transfer of military technologies to them. All producers of arms that are on the United States Munitions List are obligated to register with the Center.

The Regulations on International Weapons Deliveries give detailed treatment to the most widespread terms ("export" and "license," among others), and describe the procedures for registering exporters and issuing licenses. All types of weapons, military services and scientific and technical information are broken down into 21 categories therein, depending on which the restrictions for the issue of licenses are determined. There are two types of export licenses—general and approved. The former gives broad rights to all exporters on working with some types of arms. The necessity of constant license renewals is

reduced as a result. The latter grants authority for the sale of a specific quantity of a certain type of arms.

U.S. legislation describes in detail the processes for submitting applications and issuing licenses. The Center for Defense Trade has the right to refuse to issue them to firms who have been found to be in violation of stipulated regulations or in the event of the absence of a protocol of intent signed by the potential importer, as well as if the firm does not provide detailed information on the purchaser, for which a special questionnaire should be completed. The decision to issue a license is also postponed if the State Department feels that a delivery is dangerous or harmful to the national security or foreign policy of the United States or to international stability. This question is also decided in the negative in cases where the department supposes that the requirements toward the producer, the delivery or the customer

have been violated or if events are possible that could entail the violation of those requirements.

The Department of Defense also performs a military-strategic and political assessment of the delivery—that is, monitors exports together with State on the plane of national security. The Secretary of Defense has the right to recommend that the President not approve the export of these or those goods. The preparation of the corresponding proposals is entrusted to the Assistant Secretary of Defense for Problems of International Security and the directorate he heads. The Department of Defense, within the limits of the authority granted to it by the Secretary of State, has the right to issue licenses for the export of weapons to the NATO countries (with the exception of Greece, Iceland, Portugal and Turkey), as well as to Australia, Japan and New Zealand. It can also permit the sale of non-combat gear and spare parts to other countries friendly to the United States.

The Ministry of Commerce occupies an important place in the sphere of monitoring arms exports. It has devised its own criteria for refusing the right to sell goods. Two subdivisions in the department—the Bureau for Export Regulation and the Directorate of International Trade—are concerned with regulating foreign-economic activity. The bureau has a list of monitored goods that includes 200 categories of items.

The National Security Council, the Central Intelligence Agency, the Joint Chiefs of Staff, the Arms Control Agency, the departments of treasury and energy, the administrative-budget directorate, the National Committee on Policy on Divulging Military Secrets and the Defense Technology Security Agency all play an appreciable role in the administrative-management structure formulating and realizing U.S. policy in the realm of exports of arms and military hardware. They prepare reports and recommendations on the implementation of specific deals, and they may propose and introduce new regulations governing this sphere of activity within the limits of their authority.

The U.S. budget contains dedicated programs in order to implement military sales and programs of military assistance, including "Aid for the Purpose of Ensuring Security." The budget also provides for a special compensation program aimed at covering the difference between

the amount spent by the U.S. administration (acting partly as a trade intermediary) for the acquisition of arms from the producing firms and the amount ultimately received as payment from the purchasing state.

The monitoring of the legislative system in the realm of the sale of arms and military hardware is accomplished as follows. The President submits a detailed report to the speaker of the House of Representatives and the chairman of the Senate Foreign Affairs Committee at the end of each quarter (no later than 60 days). Furthermore, if a proposal is received from a foreign state or international organization for the procurement of military matériel or the rendering of services in an amount greater than 50 million dollars, the performance of construction and design work for a total of 200 million dollars or the acquisition of "important military matériel" in an amount greater than 14 million dollars, the President is obligated to send those individuals a report on the potential deal. Congress has the right to block it via the adoption of a joint resolution within 30 days following the receipt of the report (15 days if the receiving country is a member of NATO, Japan, Australia or New Zealand). The President, however, has the right to give permission for the completion of a deal after submitting to Congress an additional report on the presence of an "urgent necessity." An analogous procedure is also provided for commercial sales of arms and military hardware for major sums.

The legislation of the United States governs in detail the question of re-exports of weapons obtained from the United States. It requires, in particular, that the receiving countries assume the obligation not to resell the weapons without the consent of the President of the United States. Federal law stipulates in regard to commercial sales that the country that is the ultimate recipient be indicated in the license, and should request permission from the U.S. State Department in the event of re-export. The United States assigns great significance to devising a unified approach to export policy on the part of countries that have common interests in the realm of security. American specialists feel that international agreements and domestic legislation, mutually complementing each other, provides sufficiently reliable control over the sale of arms.

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Fig. 2. Decision-making process for foreign military deliveries

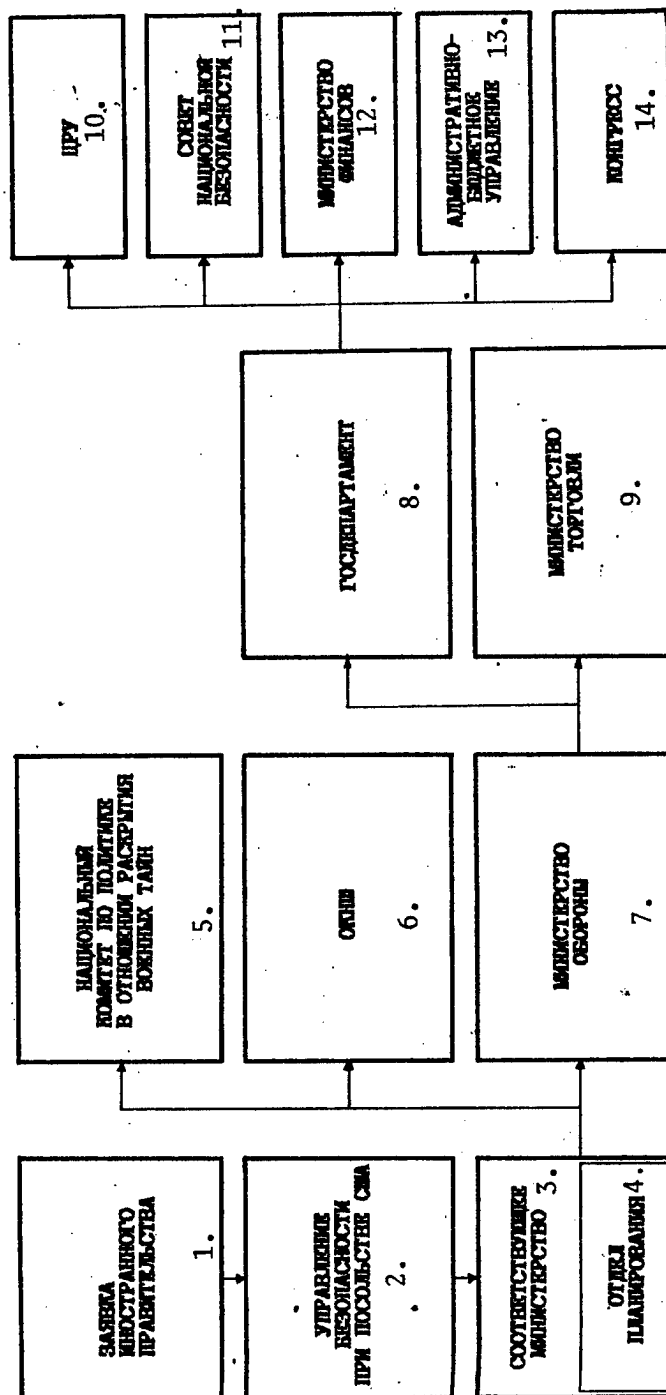


Рис. 2. Процесс принятия решений при зарубежных военных поставках.

Key:

- | | |
|---|--|
| 1. application of foreign government | 7. Department of Defense |
| 2. security administration at U.S. embassy | 8. State Department |
| 3. corresponding department | 9. Department of Commerce |
| 4. planning department | 10. CIA |
| 5. National Committee on Policy on Divulging Military Secrets | 11. National Security Council |
| 6. JCS | 12. Department of the Treasury |
| | 13. Administrative-Budget Administration |
| | 14. Congress |

DOCTRINAL ISSUES

Fortified Areas: Lessons and Conclusions

93UM0519A Moscow VOYENNY VESTNIK in Russian
No 4, Apr 91 pp 46-49

[Article by Colonel V. Sidorov, candidate of historical sciences, docent]

[Text] The question of the advisability of using fortified areas on forward defensive lines was discussed among other questions at a practical science conference of the heads of Engineer Troops, and evidently not by chance. The withdrawal of Soviet troops from contiguous states which has begun forces us to take a different look right now at ensuring the security of our western borders.

In this connection it also appears apropos to analyze previous experience. We asked Colonel V. Sidorov, candidate of historical sciences, docent, to tell in our journal about the role fortified areas played in the Great Patriotic War.

I wish to remind you right off that on the eve of World War II the construction of fortified areas was the basis of all military engineer preparation of border territories of the Soviet Union, as it was for the majority of Western European countries. Very great importance was attached to them in defense plans developed in border districts in the spring of 1941 by direction of the Red Army General Staff.

In particular, it was envisaged that, having deployed at prepared defensive lines together with fortified area artillery and machinegun units, rifle corps intended for defending the state border would be able to support Soviet Armed Forces mobilization and strategic deployment, but this did not happen. Perhaps the concept of using fortified areas in defensive operations of the initial period of war, in whose development prominent military theorists (including also D. M. Karbyshev) took part, was erroneous? To answer this question, let us go back 50 years.

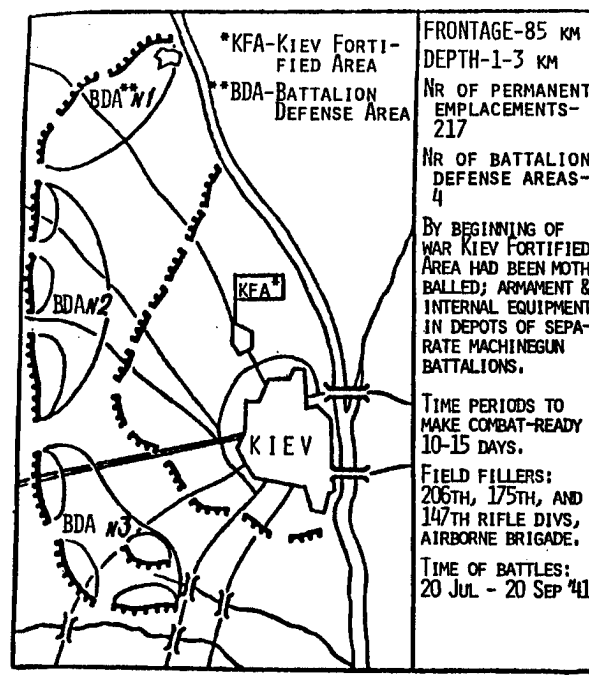
As we know, construction of fortified areas in the western part of our country went through two stages. Thirteen were built on the old state border during 1928-1937: Karelian, Kingisepp, Pskov, Polotsk, Minsk, Mozyr, Korosten, Novograd-Volynskiy, Letichev, Mogilev-Yampolskiy, Rybnitsa, Tiraspol and Kiev.

Construction began on another eight in the next year or year and a half for forming a continuous permanent defensive line: Ostrov, Sebezh, Slutsk, Shepetovka, Izyaslav, Starokonstantinov, Ostropol and Kamenets-Podolskiy. There were 1,028 emplacements concreted, but they had no internal equipment or armament in them.¹

Fortified area projects provided for creating a security area, a main defensive zone, and sometimes also a rear defensive zone 10-12 km from the forward edge of the

main zone. The main defensive zone consisted of battalion defense areas, which included several strongpoints 5-8 km apart (Fig. 1). Only ten percent of weapon emplacements had artillery armament.

Fig. 1



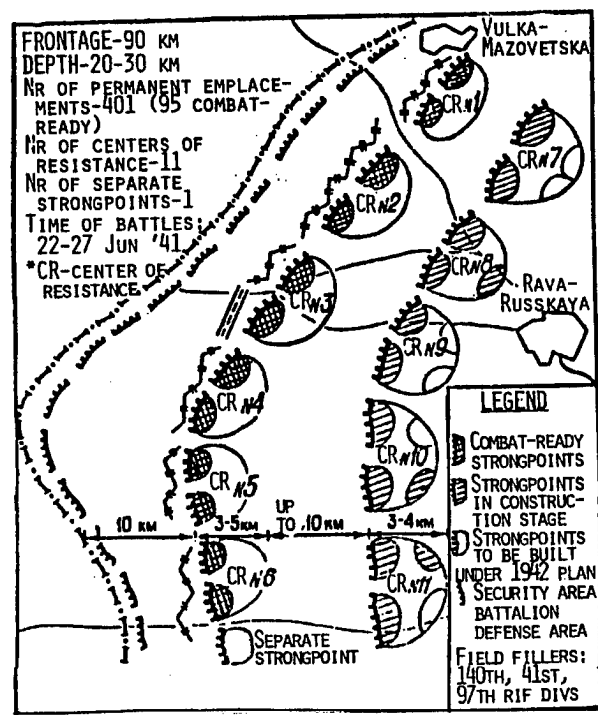
During 1939-1940 the state border was moved 250-300 km to the west and the old system of fortified areas, which had ceased to reflect prevailing views of that time on the initial period of war, proved unnecessary. All work here was stopped, weapon emplacements were mothballed, and headquarters of fortified areas were disbanded. Construction continued only on the Kamenets-Podolskiy Fortified Area. A sad fate befell the first fortified areas: their emplacements were demolished and all their equipment was concentrated at depots.

After a lengthy period of ground reconnaissance, construction began at the new state border in the summer of 1940 on the Sortavala, Keksgolm, Vyborg, Grodno, Brest, Vladimir-Volynskiy, Strumilov, Rava-Russkaya and Peremyshl fortified areas and in the north on the Murmansk Fortified Area. Later work began for preparing another 11 immediately prior to the war: Telshay, Shyaulay, Kaunas, Alitus, Osovets, Zambrov, Kovel, Verkhne-Prutskiy, Nizhne-Prutskiy, Chernovtsy and Dunayskiy.

They were distinguished from old ones in their structure and by the construction of a considerably greater proportion of permanent emplacements and positions for the reinforcing artillery units. It was deemed necessary to increase the overall depth of fortified areas by 2-2.5 times so they could withstand attacks by enemy tank groupings more successfully.

The main elements of the new type of fortified area (Fig. 2) were a security area and two defensive zones consisting of centers of resistance (battalion defense areas). The latter included several strongpoints situated in two echelons. It was planned to establish a field-type rear defensive position in the depth at a distance of 15-20 km. The frontage of a fortified area was up to 100 km and the depth from 30 to 50 km (depending on depth of the security area). Gaps of up to 20 km covered by separate centers of resistance and strongpoints were permitted between fortified areas. It was the responsibility of the field-filler division to organize the fire plan here.

Fig. 2



There were 84 construction battalions, 25 construction companies and 17 motor transport battalions as well as a large number of civilian workers brought in to build fortified areas. Beginning in April 1941 160 engineer and

combat engineer battalions of border districts and 41 combat engineer battalions of other districts were sent to do this work. Nevertheless, not one fortified area was completed by the beginning of the war.

A total of 2,500 out of 8,000 emplacements managed to be placed in combat readiness through internal resources of districts and the armament of old fortified areas (it was planned to complete all construction by year's end). Of this number, around 1,000 were armed with artillery pieces and the others with heavy machineguns.²

Low rates of arms and equipment deliveries by industry held up placing finished emplacements in combat readiness. During February-March 1941 the Workers' and Peasants' Red Army Main Military Council twice discussed the question of raising the work rates but found no solution to accelerate artillery armament and internal equipment deliveries other than to dismantle some artillery of old fortified areas and shift it to new ones (which were not structurally adapted for this). Evidently under these conditions it would have been more correct to construct that number of permanent fortifications supported by necessary equipment and to build fortified areas in succession as [the fortifications] were fully ready, covering important operational axes first.

It is also impossible not to mention that the depth of the security area of many fortified areas was shallow (3-15 km), and this depth did not exceed 400-500 m in those cases where the state border ran along a water obstacle. A number of fortified areas (Vyborg, Keksgolm) did not even have that. Hence the difficulties for field-filler troops. And maskirovka [lit. "camouflage", however, includes "concealment" and "deception"—FBIS] of combat emplacements often was in an unsatisfactory state, which permitted the enemy to uncover our system of permanent emplacements in the course of aerial reconnaissance.

The building of ditches, escarpments, post obstacles and barbed-wire entanglements was not completed in fortified areas. Minefields were to be emplaced only with the beginning of combat operations by special authorization of the People's Commissar of Defense. Of course, all this sharply weakened and essentially nullified the antitank defense.

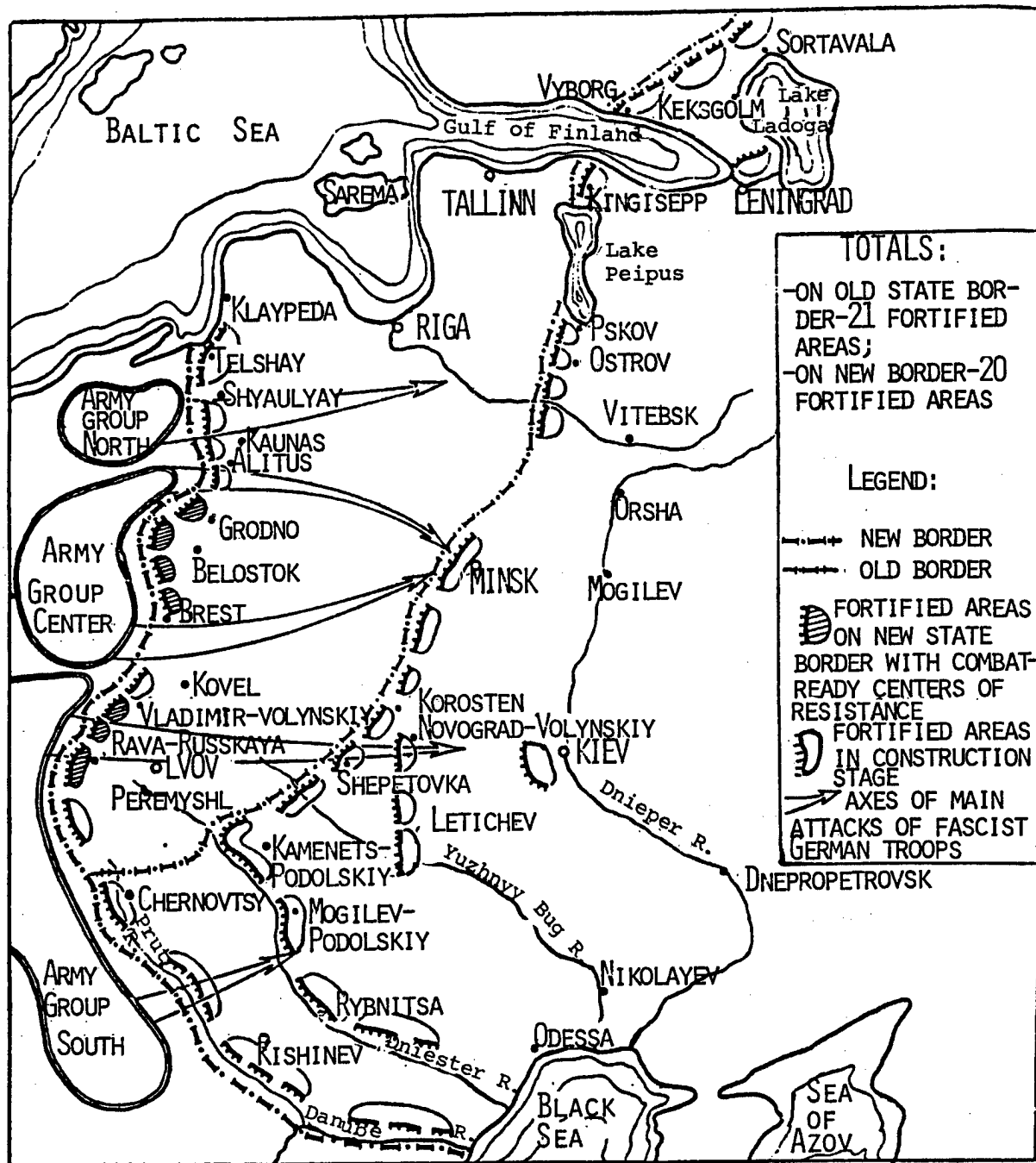
On the whole, the USSR western border was only 17 percent covered by sectors of combat strongpoints (table).³

| Military District (Prewar Period) | Planned Fortified Area Coverage (km) | Covered by Combat-Ready Centers of Resistance of Fortified Area (km) (km) | Percent Covered |
|-----------------------------------|--------------------------------------|---|-----------------|
| Leningrad | 500 | Around 60 | 12 |
| Baltic | 350 | - | - |
| Western | 400 | 120 | 30 |
| Kiev | 530 | 120 | 23 |
| Total: | 1,780 | 300 | 16-17 |

As a result of large gaps not covered by fire and by obstacles between fortified areas, centers of resistance and strongpoints, favorable conditions were created for the enemy to overcome or bypass them with minimal losses. The German

command naturally took advantage of this. Thus, in planning the first operations, axes of main attacks (see Fig. 3) were chosen where there were no combat-ready fortifications (Northwestern Front), where they could be bypassed,

Fig. 3



or on the boundary of fortified areas (Western and South-western fronts). In the latter instance the main attack force of Army Group South attacked in the sector where there was a 20-km gap between the Rava-Russkaya and Strumilov fortified areas.

Although the majority of fortified area garrisons did manage to occupy weapon emplacements with the beginning of invasion by fascist German troops, the fire plan was not organized in centers of resistance because the artillery-machinegun battalions were understrength and

because there was a delay in deploying field-filler divisions. Garrisons of many emplacements had to fight alone. Where interworking of fortified area special units and field troops succeeded in being properly arranged, the enemy suffered heavy losses, his assaults were disrupted and he was forced to shift efforts to other axes. For example, the 41st Rifle Division and 91st Border Guard Detachment defending in the Rava-Russkaya Fortified Area (the 35th and 140th separate battalions were the permanent garrison) met the onslaught of three infantry divisions and a portion of panzer division forces of the enemy 17th Field Army in an organized manner and repelled their continuous assaults for five days. The garrison of the Peremyshl Fortified Area did not surrender its positions for seven days.

Fortified areas on the old border also did not manage to be used fully for increasing stability of troop defense despite measures being taken. The fact was the measures were belated. On main strategic axes the enemy moved to the fortified areas before they were armed and occupied by troops. In his memoirs Marshal of the Soviet Union G. K. Zhukov, at that time chief of the General Staff, remarked that a major operational miscalculation had been made as to the time periods for readying fortified areas on the old border (by the 10th day of war).⁴

And only where fortified areas had been placed promptly in combat readiness did they exert substantial influence on the course of the armed conflict. Thus, Finnish troops who attacked Leningrad from the north were halted on the Karelian Fortified Area line. During July-September 1941 the Kiev Fortified Area played an important role. During 11-14 July its subunits repelled the first onslaught by enemy motorized infantry and tanks attempting to seize Kiev and crossings on the Dnieper without pausing. Relying on this fortified area, 37th Army troops repelled assaults by superior enemy forces for over 70 days. The examples cited persuade us that even then fully combat-ready fortified areas were a serious obstacle for the enemy.

Thus, war experience showed that the practice of permanent terrain fortification—creation of fortified areas—adopted at that time was correct on the whole, and the major mistakes and miscalculations made by our country's political leadership were the reason they did not bear out hopes placed on them.

Evidently not wishing to recognize this fact, our military theory either sidestepped or entirely ignored the topic of fortified areas in postwar years for conjunctural considerations. Moreover, lately first in the West and then also here the concept of creating nuclear mine belts in border areas entirely devalued even the very idea of returning to permanent fortification. I believe it is time to rethink both things in light of the principle of reasonable sufficiency which is gathering strength.

Footnotes

1. "Inzhenernyye voyska Sovetskoy Armii 1918—1945 gg." [Soviet Army Engineer Troops 1918-1945], Moscow, Voenizdat, 1985, 67 pages.
2. "Istoriya vtoroy mirovoy voyny 1939—1945 gg." [History of World War II 1939-1945], Moscow, Voenizdat, 1974, Vol 3, 439 pages.
3. Ministry of Defense Central Archives, "Red Army General Staff Fortified Areas Section" stack, list 179381, file 3, sheet 14.
4. G. K. Zhukov, "Vospominaniya i razmyshleniya" [Recollections and Reflections], Moscow, Izd-vo APN, 1974, Vol 1, 237 pages.

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MILITARY CONFLICT, FOREIGN MILITARY AFFAIRS

Memorandum of Mutual Understanding Between the Government of the Russian Federation and the Government of the People's Republic of China on the Issues of Mutual Armed Forces Reductions and Confidence Building in the Military Sphere in the Border Area

93UM0567A Moscow DIPLOMATICHESKIY
VESTNIK in Russian No 1-2, Jan 93 p 15

[Memorandum between the Russian Federation and the People's Republic of China, signed by A. Kozyrev and Qian Qichen, Beijing, 18 December 1992, under the rubric: "Official Communiques": "Memorandum of Mutual Understanding Between the Government of the Russian Federation and the Government of the People's Republic of China on the Issues of Mutual Armed Forces Reductions and Confidence Building in the Military Sphere in the Border Area"]

[Text] The Government of the Russian Federation and the Government of the People's Republic of China, hereinafter referred to as the Parties,

striving for further development of good-neighbor relations and friendship and the transformation of the border area into a zone of lasting stability and security,

convinced of the need to reduce military confrontation and to build confidence in the military sphere in the border area,

confirming the obligations that result from the 24 April 1990 Intergovernmental Agreement on Guiding Principles for Mutual Armed Forces Reductions and Confidence Building in the Military Sphere in the Border Area, and,

attaching great importance to the negotiations being conducted jointly with Kazakhstan, Kyrgyzstan and

Tajikistan in accordance with the stated Agreement and noting the significant progress attained in them,

have reached the following mutual understanding:

1. The Parties will give their representatives at the talks instructions to accelerate work on the future intergovernmental agreement in order to achieve its completion by the end of 1994.

2. The Parties have agreed that, when the agreement enters into force, practical actions will be gradually completed by the year 2000 for the purpose of reducing the armed forces in the agreed border area to the minimal level appropriate for good-neighbor, friendly relations between the two countries and to impart an unambiguously defensive structure to the troops remaining in the border area.

3. The Parties think that a gradual, speedy removal of the most destabilizing weapons systems from the border area and a substantial reduction of military activity here will be one of the most important elements for confidence building in the military sphere.

4. The Parties think that the future agreement on mutual armed forces reductions in the border area will become a major step in the sphere of real disarmament in the Asia-Pacific Ocean Region and will contribute to strengthening security and stability in that area.

This Memorandum was signed in Beijing on 18 December 1992 in two copies, one each in the Russian and Chinese languages.

[Signed] FOR THE GOVERNMENT OF THE RUSSIAN FEDERATION

A. Kozyrev

FOR THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA

Qian Qichen

Western Development of Heavy-Lift Multi-Purpose Trucks

93UM0508A Moscow *TEKHNIKA I VOORUZHENIYE* in Russian No 2, Feb 93 pp 36-37, 40

[Article based on foreign press materials by Colonel B. Belousov, candidate of technical sciences, Major A. Poskachey and Engineer V. Prozhikin: "Multiaxle Vehicles"]

[Text] Multiaxle vehicles are used abroad for transporting heavy tracked vehicles and missile systems, carrying large-size loads that cannot be broken down, and for mounting crane and load-handling equipment. Along with special army vehicles (see table), commercial vehicles modified in accordance with military requirements also are widely used.

| Indicators | Multipurpose Vehicles | | Articulated Vehicles | | | | Truck Tractors | | | |
|--------------------------------------|-----------------------|---------------|----------------------|---------------------|------------------|---------------|----------------|--------------------|----------------|------------------------|
| | M977, USA | 4540, Germany | Dragon Wagon, USA | Rolligon PD B5, USA | Magnum-4, Canada | Mk 48/17, USA | 4850A, Germany | 48525 VFA, Germany | TG250, Belgium | (Quinos Aljaba), Spain |
| Wheel Arrangement | 8x8 | 8x8 | 8x8 | 8x8 | 8x8 | 8x8 | 8x8 | 8x8 | 8x8 | 8x8 |
| Equipped Weight, tonnes | 17.0 | 18.4 | 12.5 | 11.5 | 37.2 | 21.7 | 18.1 | 11.3 | 28.4 | 21.1 |
| Load Capacity, tonnes | 10.0 | 10.0 | 9 | 9-14 | 63.5 | 8.9-18.1 | - | - | - | - |
| Crane Load-Lifting Capacity, tonnes | - | - | - | - | - | - | - | - | - | - |
| Total Weight of Multiple Rig, tonnes | - | - | - | - | - | - | Up to 110 | Up to 150 | 250 | 96.0 |
| Engine Power, kw (hp) | 327 (445) | 235 (320) | 166 (226) | 198 (269) | 324 (465) | 327 (445) | 368 (500) | 368 (500) | 335 (456) | 386 (525) |
| Maximum Speed, km/hr | 88 | 90 | 90 | 40 | 37 | 84 | 90 | 66 | 60 | 66 |

The U.S. Army inventory includes the Oshkosh M977 multipurpose four-axle, all-wheel-drive vehicle intended for towing trailers weighing 10-15 tonnes. A DDA 8V92TA two-stroke liquid-cooled V-8 diesel is installed in it. An Allison HT 740D four-speed automatic hydro-mechanical gearbox and Oshkosh 55,000 two-speed transfer case with interlocking bogie-to-bogie differential are used in the transmission. Driving axles are equipped with a mechanism for positive locking of differentials.

The balance arm suspension includes leaf springs and hydraulic shock absorbers. Wheels of the two front axles are steerable. There is a hydraulic booster in the steering drive. The service brake system consists of disk brake mechanisms and a double-loop pneumatic drive. Spring-loaded energy storage of the parking brake system acts on wheels of the third and fourth axles. A winch with a pulling capacity of 89 kN (9.1 tonnes-force) is installed on the vehicle at the client's request.

The M977 is produced in several modifications: M988 tank truck, M983 truck tractor, M984 recovery tractor, M985 truck with crane for self-loading. A 10x10 vehicle also has been created based on the M977. It was developed in accordance with requirements for hauling packaged army cargoes. Its series DDA 8V92TA diesel has an output of 368 kw. An automatic five-speed gearbox and Oshkosh two-speed transfer case are installed in the vehicle. Wheels of the first, second and fifth axles of the new chassis are steerable to reduce the turning radius.

The West German N4540 vehicle has the Deutz BFL 413 235 kw four-stroke air-cooled V-8 diesel. A variable-range [diapazonnyy] hydraulic transmission consisting of the WSK 400 torque converter/clutch unit and six-speed ZF6G-90 gearbox is used in the transmission. A planetary, positive-interlocking bogie-to-bogie differential is installed in the ZFA600/30 transfer case. Driving axles are equipped with planetary wheel reduction gears and the spring-lever suspension has hydraulic shock absorbers. The two front axles are steerable. The steering drive has a hydraulic booster.

Service brake system brake shoe mechanisms are equipped with a double-loop, combination drive: front axles are pneumohydraulic, rear axles are pneumatic. Brake cylinders of wheels on rear axles have spring-loaded energy storage used as a parking brake system. A winch with a pulling capacity of 49 kN (5 tonnes-force) and a hydraulic drive, or a Model N4640 crane with a one tonne load-lift capacity is installed on the vehicle.

The MAN firm presently puts out a family of N4540 vehicles with a load-lifting capacity up to 15 tonnes in a modernized version. Liquid-cooled in-line 6-cylinder or V-10 diesels equipped with a turbo-supercharging system with cooling of supercharged air are installed in the vehicles. The power plant output is 184-404 kw. The transmission uses nine-speed to sixteen-speed ZF gearboxes. In the opinion of specialists, the use of improved machine units in designing the N4540 transmission permits increasing tractive effort in low gears by 40 percent.

Tanks and other heavy tracked equipment are carried by multi-axle truck tractors in armies of the majority of foreign countries. The Model 4850A truck tractor produced by Mercedes Benz was created based on the triple-axle 3850A vehicle. Double rear wheels with 14.00R20 tires are installed on it, and single wheels with 24.00R21 tires are used for operating on sandy soils. Fuel tank capacity is from 400 to 1,000 liters. An Allison automatic transmission with built-in decelerating brake can be installed on the truck tractor at the client's request. Roadability is increased through a centralized tire air pressure adjustment system.

The braking system is equipped with a pneumatic, double-loop drive with a braking effort regulator. Spring-loaded energy storage performs the role of a parking brake and acts on all wheels. A drive controlling brakes of the semitrailer independent of the service and parking

systems was made in the truck tractor. The all-metal, two-door, three-seat cab is equipped with two sleeping places, air conditioner and autonomous liquid-type heater. Drum winches with hydraulic or mechanical drive can be accommodated behind it.

The ZF 4S 150 GP variable-range hydraulic transmission is used on the German MAN four-axle 48.525VPA truck tractor. A two-speed transfer case is installed. Driving axles are made together with wheel planetary reduction gears. Front driving axles are constantly engaged. Wheel-to-wheel differentials and center-to-center differential of rear axles are interlocking. The front bogie suspension is on semielliptical leaf springs with supplementary hollow rubber elements and hydraulic shock absorbers. The balance arm suspension of rear wheels has a lateral stabilizer. The service brake system drive is pneumatic and double-loop. A parking brake with spring-loaded energy storage acts on the rear wheels. One or two winches with a pulling capacity of 200 kN (20.4 tonnes-force) and equipped with mechanical or hydraulic drive can be mounted behind the cab.

A Belgian gravel truck with a seven-place cab over the engine has a Clark automatic transmission. Two-speed final drives and wheel planetary reduction gears are mounted on the driving axles. The front bogie suspension is on semielliptical springs with hydraulic shock absorbers, and that of the rear bogie is a balance-arm suspension. The braking system has a double-loop pneumatic drive. The parking brake system with spring-loaded energy storage acts on the rear wheels. A winch with mechanical drive and pulling capacity of 300 kN (30.6 tonnes-force) is installed.

The transmission of the Spanish Quinos Aljaba [transliteration] vehicle is equipped with a variable-range hydraulic transmission with 14-speed gearbox. The torque converter is equipped with a decelerating brake. The transfer case is made in the same housing as the gearbox and has an interlocking bogie-to-bogie differential. The service brake system has a pneumatic, double-loop drive and the parking brake system has spring-loaded energy storage. The truck tractor is equipped with two winches with hydraulic drive. The pulling capacity of each is 200 kN (20.4 tonnes-force).

Multi-axle articulated vehicles with off-road capability have been used abroad in recent years. They differ from conventional vehicles by the presence of an articulated (breaking) frame, and from multiple truck-trailer rigs by the design of the connection of individual elements. Articulated vehicles of two types are produced—truck-tractor and trailer. In the first case the elements (sections) are interconnected by a common cargo bed, which is connected with them by articulations (fifth-wheel assemblies), and in the second case the sections are interconnected by an articulated hitch with up to three degrees of freedom.

In the American articulated trailer-type Dragon Wagon vehicle the front section accommodates the power plant

and three-place cab and the rear section is intended for accommodating a cargo bed. The articulation has two degrees of freedom, supporting vertical displacement of sections and also their turn relative to the vehicle's longitudinal axis. Wheels of the two front axles are steerable.

The American Rolligon PD-85 8x8 articulated vehicle has a turbo-supercharged diesel, four-speed gearbox, dual-disk clutch and torque converter. The running gear consists of two interchangeable bogies and pneumorollers. The sections are interconnected by an articulated joint with three degrees of freedom. A special mechanism is provided for locking the sections in a certain position.

The American firm of Oshkosh is producing the Mk 48/17 articulated 8x8 trailer-type vehicle based on the multipurpose M977 vehicle. Its front section accommodates cab and engine, and the rear section the cargo bed. An automatic four-speed Allison gearbox and two-speed transfer case are used. Suspension of front-section wheels is on semielliptical springs, and that of the rear section is on a balance arm. The vehicle is equipped with a winch with a pulling capacity of 136 kN (13.9 tonnes-force). The Magnum-4 of the Canadian firm of Foremost is among articulated truck-tractor vehicles. It is intended for carrying long freight which cannot be broken down and which weighs up to 63.5 tonnes and is up to 24 m long.

| Truck Crane Indicators | Make, Manufacturing Country | | | | | | | | | |
|--|-----------------------------|------------------------|---------------------|-----------------|----------------|-----------------|------------------------|----------------|------------|---------------------|
| | 80GMT, Germany | Hydra Truck 80/88T, UK | AMK 146-63, Germany | 120GMT, Germany | MK-1200, Japan | T-1160, Germany | KF-300.73/915, Germany | NK-1600, Japan | 1400E, USA | AMK 200-83, Germany |
| Wheel arrangement | 10x8 | 10x6 | 12x6 | 12x8 | 12x6 | 14x8 | 14x8 | 14x6 | 16x8 | 16x8 |
| Weight equipped, tonnes | - | - | - | - | 71.8 | - | - | 84.0 | - | - |
| Load-carrying capacity, tonnes | - | - | - | - | - | - | - | - | - | - |
| Crane load-lifting capacity, tonnes | 80 | 80-88 | 146 | 120 | 120 | 160 | 300 | 160 | - | 200 |
| Full weight of truck-trailer rig, tonnes | - | - | - | - | - | - | - | - | - | - |
| Engine output, kw (hp) | 250 (3240) | 268 (364) | 316(428) | 340 (462) | 320 (435) | 385 (523) | 353 (480) | 318 (432) | 312 (424) | 382 (519) |
| Maximum speed, km/hr | 63 | 63 | 73 | 63 | 65 | 62 | 61 | 77 | - | 67 |

Many foreign countries use multi-axle chassis for mounting crane equipment. The leading manufacturers of these vehicles are the German firms of Faun, Krupp and Liebherr; U.S. Grove; UK Coles; and Japanese Kato. The nonall-wheel-drive, five-axle 80GMT (Germany) and Hydra Truck 80/88T (UK) chassis are made in a bogie configuration with a 2-3 axle arrangement. Their transmission includes main and secondary gearboxes accommodated in one crankcase, a transfer case with bogie-to-bogie differential, final drives, and wheel-to-wheel and center-to-center differentials. The steering drive has a hydraulic booster. It is activated from the engine or transmission. Wheels of the 1st, 2nd and 5th axles on the 80GMT chassis and of the 1st, 2nd and 3rd axles on the Hydra Truck 80/88T vehicle are steerable to provide a minimum turning radius (16.5 m).

The German (AMK 146-63 and 120 GMT) and Japanese (NK-1200) six-axle nonall-wheel-drive chassis are made in a bogie configuration with 2-4 or 3-3 axle arrangement. German vehicles are equipped with a hydromechanical transmission into which a hydraulic or electric decelerating brake is built in. A transfer case with

bogie-to-bogie differential is in the same unit with the gearbox. Wheels of the three front axles and of the rear axles are made steerable to provide good maneuverability. The chassis has a service and auxiliary braking system with pneumatic drive. Braking effectiveness is improved by a double-loop pneumatic drive of the service braking system: one loop acts on wheels of the 1st, 3rd and 5th axles and the other on wheels of the 2nd, 4th and 6th axles.

Wheels of the AMK 146-63 have a hydropneumatic suspension with center-to-center (longitudinal) and side-to-side (lateral) hydraulic balance arms. The two front axles of the 120 GMT chassis are equipped with leaf springs with hydraulic shock absorbers. Wheels of the rear bogie are connected in pairs with a hydropneumatic suspension with the help of hydraulic balance arms (3rd and 6th, 4th and 5th axles).

A feature of the design of the transmission of Japanese NK-1200 chassis is use of a ten-speed mechanical gearbox. Suspension of the vehicle's two front axles is on leaf springs with torque rods, that of the third is hydropneumatic, and that of the three rear axles is balance arm

with torque rods. The pneumohydraulic drive of the service braking system has two pneumatic loops. Disk brakes are used on steerable single wheels of the front three axles, and drum brakes on dual wheels of the rear axles. The parking brake system is combined with the emergency system and represents spring-loaded energy storage affecting wheels of the three rear axles.

A torque converter and planetary gearbox are installed on the nonall-wheel-drive, seven-axle German LT-1160 and KF-300.73/915 chassis. A decelerating brake is mounted between them. Steering has a hydraulic booster and emergency (backup) drive of front and rear wheels. The braking system drive is pneumatic and multiloop. Suspension of the LT-1160 vehicle is combination: that of the front bogie is balance arm with interlocking coil springs; that of the three rear axles is leaf-spring equipped with hydraulic shock absorbers which can be locked positively in movement.

The nonall-wheel-drive, seven-axle Japanese NK-1600 chassis has a mechanical ten-speed gearbox. Wheels of the 5th, 6th and 7th axles are driving and those of the 1st, 2nd, 3rd, 4th and 7th axles are steerable. Steering is equipped with a hydraulic booster. Suspension of the front (1st, 2nd, 3rd) axles is on leaf springs with torque rods, that of the 4th and 7th is hydropneumatic, and that of the 5th and 6th is balance-arm. The service braking system drive is double-loop and pneumatic. The parking and emergency systems are equipped with spring-loaded energy storage. There is an auxiliary motor brake.

The running gear of the eight-axle chassis of the 1400E (USA) and AMK 200-83 (Germany) is made in a bogie configuration with 2-6 and 3-5 axle arrangements respectively. The hydromechanical transmission consists of a torque converter assembled with a planetary transfer case, separated final drives, and bogie-to-bogie, center-to-center and wheel-to-wheel differentials. The steering has a hydraulic booster. The service braking system uses a multiloop pneumatic drive. There is an auxiliary and a parking brake system. The AMK 200-83 chassis uses a hydropneumatic suspension permitting redistribution of loads arising between axles and bogies when the chassis is moving over bumpy roads.

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Tendencies in Development of Western Armored Weaponry

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[Article by Lieutenant General N. Zhuravlev, First Deputy Chief of Russian Federation Ministry of Defense Main Armor Directorate: "Development of Armored Vehicle Armament (Analysis of Trends)"]

[Text] Armored equipment (tanks, IFV's and other armored combat vehicles interworking with tanks in battle or being used as an independent means of performing various missions) hold a special place in the

overall system of armaments. For example, specialists believe that by possessing a wide range of capabilities, tanks remain above all an offensive weapon of the FEBA even under conditions of defensive doctrines. Experience shows that they are used in this capacity most fully and cannot be replaced.

Prospects for development of armored equipment depend wholly and fully on directions which will be followed by an upgrading of the armament system as a whole. Therefore the question of just what it will be like in the near term can be examined only in direct connection with this process. The process of creating military equipment has become more complicated under present conditions, where its importance is growing substantially. On the one hand the designers' desire to constantly increase the effectiveness of armament models leads to their increased complexity and cost and to rapid obsolescence. Time periods for developing various systems are becoming longer, which is connected with the need for using new engineering solutions. On the other hand the uncertain nature of possible combat operations requires the presence of an armament system capable of operating in a wide range of conditions. In that situation the question of a scientific approach to creation, development and employment of the system acquires a special role.

Five directions for realizing the assigned task can be identified. One is the traditional design-engineering direction characterized by a constant improvement in qualities of armament systems through fuller use of known solutions and development of new ones. In the first case this means using more compact configurations; increasing the accuracy of fire, power of munitions and quick action of armament; upgrading armor materials; increasing overall engine output; and improving the reliability and longevity of the system as a whole. In the second case it means implementing fundamentally new configurations of vehicles and types of engines (adiabatic, gas-turbine engine with heat exchanger); creating original models of tank armament, automated target search and target designation systems, and command and control systems; and employing various means of protection (active, dynamic).

Based on a mathematical analysis of processes of combat operations, the evaluation and research direction permits forecasting their course and estimating the possible outcome and resource expenditures. In addition to substantiating a rational armament system and determining advisable time periods for interchangeability of specific models, it is possible to use it to identify the most promising paths of equipment development. The given path is a scientific basis, and the theory of combat and military-economic effectiveness serves as the base for it. After the optimum armament system has been substantiated, it is important to realize it, i.e., to create equipment in planned time periods with requisite combat characteristics and in so doing keep within allocated

funds. These tasks are accomplished within the framework of an organizational direction built on methods of program-specific planning.

The main task of the combat direction is to assist in rational use of armament in accordance with its capabilities. It is connected with an improvement in forms and methods of conducting combat operations and in the troop organizational structure. Questions of servicing, maintaining and storing armament as well as training personnel (methodology and procedure for using simulation systems, conduct of command and staff, field, and field training exercises, coordination of combat arms) are worked out within the framework of the latter direction.

The tank has the highest level of protection of all kinds of military ground equipment, and new weapons are constantly being created to kill it. This in turn leads to the need for a further increase in the vehicle's survivability on the battlefield, in concentration areas and on marches. In addition, weapons numerous in nomenclature are used for combating tanks, and so the latter have to possess high firepower. All this together gives rise to a substantial growth in the vehicle's weight, which affects an important characteristic of it such as mobility. In order to ensure that the latter is at the proper level, designers have to increase the weight of engine, transmission and running gear. Requirements for providing necessary average speeds, range and reliability also grow.

Thus one of the principal conditions in creating a tank is to keep the weight within reasonable limits dictated by the possibility of using it as a highly mobile, off-road ground vehicle adapted to being transported by various forms of transportation and to servicing by engineer equipment (ferries, bridgelayers). In addition, the state's material resources must be sufficient for producing such equipment in necessary quantities.

A distinguishing feature of the tank as a structure is the fact that the weight of the armored hull and turret presently comprise over half of total weight. This indicator can be lowered by creating sturdy protection having minimal specific weight, for which new armor materials and their rational combinations are needed. Another path is to reduce internal protected volumes by decreasing the size of component parts of the tank and increasing the density of its configuration. But implementation of these measures contradicts the need for supporting requirements of the vehicle's human engineering and accessibility of its assemblies for servicing and maintenance.

Existing limitations on the tank's size are connected with the fact that it has to be transported by rail and aircraft. At the same time, requisite ground pressure can be ensured by increasing track width, and a certain hull width is needed for rational accommodation of crew and equipment. Therefore designers make full use of the tank's permissible lateral dimension. A further decrease in ground pressure is possible only by increasing the

length of the bearing surface, but then the vehicle's agility indicators deteriorate.

Growing demands on tank speed over broken terrain and on its negotiation of difficult sectors predetermine increased clearance. The hull and turret must be made higher to improve crew seating conditions. Weapon elevation can be increased in the very same manner. But with introduction of those changes it is impossible to reduce the weight and ensure good indicators of vehicle inconspicuousness and invulnerability.

With the saturation of tanks with automated and electronic systems (automatic loader, sights, stabilizers, and communications and coordination equipment) and with an increase in external and internal loads, there is a growth in their design complexity, an increase in the cost of set-making parts and materials necessary for production, and manifestation of a trend toward an increase in equipment failures, for whose neutralization special means must be sought. Another important factor is that only highly skilled specialists can operate and service such equipment.

Designers largely follow identical paths in their desire to create tanks possessing characteristics that are optimum from all standpoints. But the specific nature of military doctrines of different countries dictates a difference in methods of realizing an assigned mission and in particular in choosing a configuration, which determines the number of crew members, combat weight, and fighting compartment dimensions. Thus, while the West has adopted a configuration with four crew members, of whom three are in the fighting compartment (except for the Leclerc tank), there is no loader in Russian tanks, but an automatic loader is installed, which permitted substantially reducing the fighting compartment's armored volume and overall vehicle dimensions and reducing its weight (the weight of Russian tanks does not exceed 50 tonnes, while the foreign Leopard-2, M1A1 and Challenger weigh 55-62 tonnes). Installing an automatic loader required using separate-loading ammunition (for the 125-mm smoothbore gun) with a fin-stabilized, armor-piercing, discarding-sabot projectile having a high muzzle velocity (1,600-1,800 m/sec). It should be noted that there have been no automatic loaders in foreign vehicles up to the present time. It is planned to equip only models of the 1990's with them. The advantages of their use are obvious.

Through a weight reduction it became possible to adopt a six-wheel running gear for tanks, limit engine power, and thereby reduce the length of the engine-transmission compartment and of the vehicle as a whole. At the same time, the necessary unit power rating level (25 hp/tonne) and consequently the necessary mobility level were preserved. There was a 25-30 percent reduction in the area of tanks' front and side projections compared with western ones, which contributes to a decreased probability of them being hit by weapons and to increased battlefield survivability. The question of which power plants are most advisable to use for tanks remains an

issue. There are proponents both here and abroad both of the diesel as well as of the gas-turbine engine. A diesel was installed in equipment of the T-72 family and a diesel or gas-turbine engine was installed in the T-80. In using the gas-turbine engine, Russian specialists are implementing the viewpoint of their American colleagues about the need to have a special FEBA armored tanker vehicle, which will permit compensating for great fuel expenditure.

An important advantage of Russian tanks is the presence of missile armament on them supporting engagement of armored vehicles and, of special importance, fire-support helicopters at ranges exceeding the range of effective fire of artillery projectiles (over 3 km). Foreign specialists assume that an antitank missile system must be accommodated on a special escort vehicle. The United States, for example, is developing such a vehicle (LOSAT) on a chassis of a medium weight category.

With respect to principles of outfitting and characteristics of the fire control system, they are basically similar. Russian and western tanks use laser rangefinders, devices for automated determination of tangent elevation settings for firing, their lead, and input to a stabilized gunlaying drive and turret drive. The gunner's main sight has independent field of view stabilization (error 0.15 mrad), which increases the likelihood of detecting a target during a search and the probability of hitting it during firing.

There are certain differences in outfitting of the commander's workstation with vision and aiming devices. While in Leopard-2, Leclerc and Challenger-2 tanks the commander has stabilized panoramic instruments, in Russian tanks (as, by the way, also in the American M1A1 tank) the priority in detecting targets belongs to the gunner. Basically light-gathering and amplifying infrared night vision devices are used as night vision and aiming devices in Russian vehicles and thermal imaging devices are used in western vehicles. But despite certain advantages in target detection range, the latter also are not devoid of a number of deficiencies, the most substantial being that they cost too much.

Methods of protection for Russian and western tanks also are largely identical. In particular, multilayer composite armor, dynamic armor, and large design angles of inclination of armor plates are used. The basic principle of protection also is common: protect yourself against tank weapons in the most probable angles of fire at actual ranges of combat and against the most advanced and mass-produced antitank weapons.

In recent years the level of protection of foreign tanks has been increased basically through an increase in physical thickness of armor and use of multilayered obstacles. A distinguishing feature of the new third-generation vehicles (M1A1, Leopard-2, Challenger) is the large internal volume (17-18 m³), and their weight reached 60 tonnes. Russian specialists are paying primary attention to increasing density of configuration and miniaturization

of internal assemblies. They succeeded in ensuring a level of protection close to the foreign level, with vehicle weight being 40-46 tonnes.

The general world trend toward further development of tanks is determined by a number of military-technical, technological and economic factors. Under conditions of a decrease in level of confrontation of the leading world powers and a reduction in volumes of financing for military production, there has been a sharp reduction in the number of tanks produced and a transition is being made from developing new designs to modernizing existing ones. It is assumed that the main attention here must be given to increasing vehicle protection against precision weapons (above all by using systems for countering guided and homing weapons), creating jamming systems and decoys, and reducing detection signatures in all bands.

The general viewpoint of specialists of the majority of countries is that armament will develop in the direction of increased fire accuracy and quick action through automation of target detection, identification and selection and automation of loading. In accomplishing these tasks, foreign specialists propose to create a new tank base (crew of three, reduced volume, a decrease in weight to 50-52 tonnes), which is a very complex and costly task. Russian designers already have a sufficiently developed small-sized base, and so they can upgrade the vehicle along an evolutionary path.

Opinions of experts of leading tank-building countries also coincide to the effect that it is necessary to install automated command and control systems in tanks which will be able to receive and process information about the battlefield in real time and accomplish an exchange of information and target designation. The first tanks of the system presumably may appear in the late 1990's. Creation of a family of armored vehicles on standardized chassis is considered a promising direction.

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Development of Robotics in Military Affairs

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[Article by Candidate of Technical Sciences Colonel A. Averchenko, Deputy Department Chief V. Kuleshov and Chief Scientific Associate Doctor of Technical Sciences B. Kononykhin under the rubric "Status, Problems, Prospects": "Robotization of Armaments"; based on materials in the foreign press]

[Text] *This article is the first in a series devoted to the problem of robotization of armaments and military hardware. The aim of this feature is to acquaint the reader with basic terminology definitions in this realm, sketch the outlines of the new areas, disclose methodological aspects of the analysis and synthesis of robotic systems and robots and show their development dynamic and*

trends based on an analysis of available data on the achievements of foreign military robot building.

The word "robot" as a term appeared for the first time in 1921, and signified a human resemblance in its meaning. Both an outward and an intellectual resemblance were moreover assumed. The outward human resemblance became only an individual manifestation with time to the extent of the development of robotics, while the intellectual was not only retained but was also constantly expanded. Foreign specialists, proceeding on that basis, have formulated the term "robot" as an abstract (according to its principles of construction) multifunctional machine that is analogous in action and behavior to a person under certain conditions. It should moreover have a clearly pronounced material body (any configuration), the necessary means of sensing and reprogrammable and adaptive control systems.

The achievement of this level of human resemblance entails solving a series of interconnected and complex problems, requiring time and a step-by-step progression in the work.

There are currently no machines (including for military purposes) that conform entirely to the definition cited above. The term "military robot" has thus rarely been used in the foreign press since 1980. The expressions "robotic devices" (*i.e.* subsystems that are synthesized according to the methodology of robotics) and "means of artificial intelligence" (*i.e.* subsystems for decision-making according to an aggregate of information arriving from means of sensing) are encountered more often.

The transition from human-operator systems to military robots, in the opinion of foreign specialists, cannot be accomplished in one leap. Hybrid military systems (human-operator systems + robotic devices) will be created first.

Specialists abroad feel that one specific feature of military robotics is that it includes automatic (non-programmable) equipment, machinery without crews (BEMSs), military robotized systems and military robots.

The machinery without crews is military hardware on which a crew is lacking entirely on the mobile vehicle, with the crew located at a specially equipped control point.

A robotized system is understood to mean any previously known military hardware, one or several of the operations of which has become robotized by virtue of its modernization and improvement.

The most important issue in the robotization of military hardware is considered to be isolating its stages, predicting the utilization of achievements in the realm of the latest technologies and utilizing them in the potential spheres. The development dynamic of military robotics, in the opinion of specialists and experts at a research

institute (at Stanford), is defined by scientific, engineering and technological achievements. Many scientific uncertainties have today effectively been resolved on a general plane. The lack of the corresponding technical hardware and technological capabilities should be considered the restraining factor.

The machine systems without crews could be synthesized from the standpoint of contemporary systems theory using various methodologies. Individual technical solutions at the contemporary stage of robotics development are teleBEMSs, autoBEMSs and robotoBEMSs, which are specialized technical hardware that is synthesized according to the methodology of remote control, automatic control or robotic control respectively.

The functions of observation, work and movement are dimensional degrees. The concept of a "robotized system" may be interpreted with a regard for the foregoing. Insofar as no clear-cut definition is cited in foreign sources, we offer our own interpretation. A robotized military system is a hybrid technical device (teleBEMS, autoBEMS, robotoBEMS), one or several dimensional degrees of which can be partially or entirely robotized.

The predictions of the American Robotics Institute state that only robotized military systems, and not military robots, will be incorporated into the armies of all countries before the year 2000, with the most preferred areas of robotization being means of reconnaissance, mining and mine clearing, transport and various self-training systems.

A robotic device, in the definition of American specialists, is a reprogrammable manipulator that is intended for the movement of parts, tools or other special assemblies. A robot is a highly specialized, multifunctional, exclusively autonomous and energy self-sufficient technical device that has a reprogrammable control system intended for the assessment of current situational scenarios and the issue of the necessary information, the performance of prescribed operations, the completion of prescribed movements or the simultaneous realization of all of the aforementioned functions. A robot that performs the functions of assessing current situational scenarios and issuing the necessary information is called an informational robot, one performing prescribed servicing operations is a manipulator and one that performs prescribed technological operations is a process robot. A robot that makes prescribed movements while moving in space is called a mobile robot.

These definitions pertain equally to military robots as well, since in accordance with modern systems theory civilian industrial robots and military robots are synthesized according to a unified methodology.

The opinion of foreign specialists is that the production of robots and robotic and remotely controlled systems, as well as automatic systems, is based on the principal areas of mechanotronics. The development of measurement and information technology, electronic engineering, microprocessors, automatic control systems,

information theory, mechanics, transport technology, laser technology and electro-optics, computer technology, programming and materials science have all stimulated military robotics.

Such engineering and technological problems as the development of special sensors and sensing systems, computer hardware and programming, servomotors, mechanical robot assemblies, systems for information-processing, model identification and decision-making, interface devices (operator—information display systems—machine) and the improvement of technological, metrological and test bases (subdivisions) are all considered to be essential for the accomplishment of robotization for the ground forces.

Contemporary achievements in the realm of science and technology are facilitating the development of military robotics, the application of commercial robots in industry confirms the physical feasibility of many of the military models and the development of sensing systems and microprocessor technology is stimulating the creation of artificial-intelligence systems.

The principal spheres of the expected application of military robots and general-purpose, combat, combat-support, engineer-support and technical-and rear-support robotized systems (according to generalized data in the foreign press) are presented in the table.

Principal Spheres of Application of Military Robots and Robotized Systems

| General purpose | Combat | Combat support | Engineer support | Rear and technical support |
|---|---|--|---|--|
| Identification and monitoring of state of environment | Defeat of targets | Performance of reconnaissance (radiation, chemical, biological and tactical) | Engineer reconnaissance of terrain and water obstacles | Tactical and technical support |
| Performance of transport operations | Patrolling in areas of special objects | | | |
| Performance of manipulation operations | Performance of protective and guard functions | Surveillance, detection and target designation | Emplacement of minefields and clearing of lanes in minefields | Evacuation and repair |
| Improvement of systems for servicing various assemblies and units | | Reconnaissance of means of electronic warfare | | Transporting of freight and ammunition |
| | | Detection of wireline communications and command and control | Clearing of routes, digging of trenches and excavations | |
| | | Laying of smoke screens | Support of crossings | |

The problematical issues of robotics are considered to be the new postulation of tactical tasks, the formulation of requirements for hypothetical robots and the creation of scientific, engineering and technological support.

The army and industry of the United States, according to data cited in the American press, are implementing the practical realization of robotic systems according to the modular principle—a multi-purpose, remote-controlled, self-propelled platform is selected, and various arms systems are synthesized on the basis of it.

It is appropriate to cite the research of the President's Commission on Industrial Competitiveness when discussing the emergence and development of military robotics in foreign armies. The level of information on the results of research to study the pace and prospects for the utilization of industrial robots in the United States and Japan is very large and convincing. Just one fragment of a comparative analysis is presented below. The United States required 15 years for the robotization of automobile production, 17 for electronics technology, 19 for domestic technology, 20 for metallurgy, 3 for the steelmaking industry and 18 for machine-tool building (an average of 12 years). This process started six years later in Japan than in the United States—that is, in 1967—and the robotization of automobile production

took 6 years, electronics technology 2 years, metallurgy 9 years and machine-building 15 years (an average of 8 years). These data testify convincingly to the fact that even with an orderliness in any industrial production that is virtually beyond reproach, no fewer than 15 years are required for the solution of the problems of robotization from an absolute standstill.

When projecting these assessments onto military robotics, it should be recalled that its assimilation and production are being accomplished virtually without partnership or mutual enrichment in the realm of engineering solutions. The extent of correlation between industrial and military robotization evokes no doubts among specialists therein. The data on industrial robotics are thus quite informative. Whereas there were 6,300 robots manufactured in the United States in 1982, there were 100,000 and 55,700 in Japan in 1990. The National Institute of Standards of the United States predicts that the production volume of industrial technical-vision systems (STZ) will increase from 60 million to 1.2 billion dollars over ten years (1984-94) in the United States alone. It should be emphasized in particular that a technical-vision system is a quite unequivocal determination of the extent of machine (artificial) intelligence in robot-building.

Leading institutes and universities in the United States, the FRG, Japan, Great Britain and Italy are currently engaged in robotics research. The areas of their research are not limited by the bounds of the machine-building field. The Technological Institute in the state of Georgia (United States), for example, has been researching methods for the navigation of mobile robots using stereotypical movement patterns. The foundation of this approach, the feasibility of which was demonstrated via modeling and in experiments using an actual mobile robot, is the data of neuro-physiology. The speed of movement of the robot and the steering control were determined according to the potential-field method. The distributed architecture of the control system of the autonomous mobile robot is supported by the operation of ultrasound and visual sensors, a "pilot" (an obstacle-skirting unit) and modules that realize stereotypical movement patterns. The short-term memory stores information on a model of the environment constructed by a terrain-mapping unit. The actions are replanned comparatively infrequently—when immobile obstacles are detected. This approach is expected to be extended to the case of three-dimensional space, for the control of aerospace and underwater mobile robots.

The NEC Corporation (United States) has developed a system for guiding transport robocars that uses a highly sensitive magnetic sensor and routing guides made of soft ferromagnetic material or ferrite paint. Such routing guides are very cheap, reliable, resistant to contamination and can easily be laid down both inside and outside enclosures, and make possible flexible changes in the program of movements of the mobile apparatus controlled from a microprocessor.

Virtually all machine-building and technological training centers, along with the specialized scientific and production organizations, are engaged in solving robotics problems in the United States. The University of Southern California will suffice as an example; research in the realm of robotics has been underway there for almost ten years at base laboratories for robotics, modeling of the mind, machine vision and intellect and grasping devices. That work is subsidized by the National Science Fund, NASA, DARPA, industrial enterprises of the United States and the Jet Propulsion Laboratory.

It is enough to note that the efforts of mechanical and electro-engineering departments have developed the robots US Robotics-100, IBN-7545 and other analogous models. Research is underway at the university on problems of remote control of manipulators, telerobots with a regard for the effects of time delays, and non-ideal communications channels and synthesis of expert systems to aid the human operator controlling the telerobot.

The work program of the Oak Ridge National Laboratory (United States) in the realm of robotics and intelligent systems (RIS) is a visible example of the energetic development of military robots and robotic systems. It is performing comprehensive research in the realm of robotics, remotely controlled manipulators, artificial

intelligence, neuronets and parallel computations. The Department of Defense, through organizations of the U.S. Army and Navy, the Aeronautics Laboratory of the U.S. Air Force and NASA, is subsidizing research on mobile robots, telecontrolled BEMSs and remotely controlled manipulation systems. The laboratory is developing a system to coordinate the application of various types of robots and robot systems under the conditions of combat operations.

The RIS program has an interdisciplinary structure—it utilizes the experience of scientists and engineers of various subdivisions and laboratories; the results of the work are passed on to the Department of Energy, Department of Defense, NASA and other sponsors and customers.

The research under the RIS program is aimed at the realization of the interests of the person in hostile and semi-structured environments where it is necessary to support navigation, manipulation and inspection in real time. The fields being studied include machine intelligence, the structuring of machinery able to perform logical reasoning and self-training when encountering unforeseen situations; efficient computations, the development of neuronet computers, parallel algorithms (including those being run on sequential machines) and multiprocessor systems; mechanics, dynamics and the control of flexibly formulated manipulation operations and the positioning of robots; technical-vision systems (STZ) and other sensors for the effective structuring of a model of a three-dimensional world; the development of a system of remote control for complex remote operations with the maximum effectiveness and resistance to gradually worsening characteristics of the apparatus (the development of systems for the transmission of information, repulsion of forces, communications etc. is required for this); man-machine interaction for the "joint" fulfillment of assignments; and, the integration of the system as a whole for checking the feasibility of proposed concepts and synthesizing the results of independent research and development.

The work under the RIS program is being conducted in two areas in an organizational regard—robots and remotely controlled manipulators (with groups of specialists to support mobility and the manipulation operations, and to the develop sensors and electronic units of the robots), and artificial intelligence and advanced computer systems (with groups for planning, logical reasoning and the resolution of tasks both with neuronets and the combination of sensor data). Another field of activity is connected with the overall integration of the results of the program and the coordination of projects, including the distribution of resources and the assurance of the quality and deadlines for the performance of the work.

The Center for Engineering Systems Advanced Research (CESAR) has created a special interface that makes it possible for a human operator to maintain communications with combat robots. They have a special test jig

intended for testing the robots and robot systems, as well as researching the applications of robot soldiers. The technical characteristics of the jig are presented below.

It has a mobile platform with a mass of 1,134 kg with a diesel engine that provides speeds of movement of 12—16 km/hr across rugged terrain. Communications with the operator's control panel are accomplished along a cable that automatically extends and retracts. A manipulator with three degrees of mobility mounted on the platform has a lift capacity of 136 kg (with its own mass 90 kg), a radius of operating area of 2.4 meters, a positional recurrence of +0.3 mm and a speed of movement of 0.6 meters/second vertically and 1.25 meters/second horizontally. The development of a cluster with a lifting capacity of 100 kg (with an intrinsic mass of 34 kg) is also expected.

The computer equipment used at the center includes a Gray-1 [as published] analog computer structured according to the configuration of a two-dimensional automated cell with 65,536 units; LISP and Lambda machines; a graphics workstation with IRIS-3; an NCUBE hypercubic parallel computer with 63 units (with full utilizations—1,024 processors—its rate of operation is about 500 million floating decimal point operations, but its size is no more than half a cubic meter including the power supply unit and the cooling system). The center also has advanced software, and program support for SAPR [computer-aided design] in particular.

A large number of scientific works on autonomous navigation (machine vision, parallel computations, multisensor systems, the formation of models of a non-stationary world, real-time expert systems and the self-training of an autonomous robot with subsequent movements in an environment), manipulation systems (models of light and pliant arms, kinematic control with excess degrees of mobility, control of manipulators according to visual information), the integration of various equipment and methods in a unified system (planning of assignments, coordination of the actions of various types of participants in joint work, analysis of uncertainties, distribution of computer loads) and the applied results of the utilization of robots in various fields have been done and published within the framework of the RIS program.

One of the central problems in the field of military robotics, in the opinion of foreign specialists, is the creation of autonomous (wheeled or tracked), mobile robots that are capable of independent navigation in a previously unknown operating environment. One theoretical project, as opposed to most of the known algorithms that answer to the configuration of stop—look around—move, is a proposed algorithm that would make it possible, based on sensor information, to formulate several subgoals in the process of robot movements in such a way that the attainment of the goal over an assigned time is guaranteed.

Hierarchical control systems must be structured in order to control the movements of mobile robots. One typical feature of such systems is the fact that the path of a mobile robot without collision with obstacles is planned at the upper level using maps of the surrounding terrain. Then a nominal profile is set in accordance with that route, as a result of which the desired trajectory is assigned in a system of coordinates of the robot environment. The trajectory formulated in that manner is sent to the lower level of the control system, which now directly formulates the appropriate commands to the servomotors of the steering apparatus and wheels of the mobile robot.

The relief of the terrain, as well as the spread of the networks of natural roads, must be taken into account when realizing the visual navigation of mobile robots. The Technical Vision Laboratory of the University of Maryland (United States) has developed a modular system of navigation that, after the processing and analysis of video information, formulates the controlling influences on the servomotors of the mobile robot's movement system. The navigational strategy is realized as follows: the system first "looks ahead," analyzes what it sees and advances a guaranteed distance; then the robot advances "blind" a short distance, after which the cycle is repeated. The processing of the monocular image is performed during the period of "blind movement," and traits are singled out (straight-line contours) that are then interpreted as three-dimensional configurations. The method of restoring the shapes according to outlines, as well as reasoning (machine) using sets of rules, is utilized therein. A local map that is used for navigation, as well as for selecting zones (of interest) in the field of view, is structured on the basis of the information thus obtained. The interest in military robotics is always a concrete one.

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Armed Incidents on Afghan Border

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[Article by Dmitriy Smirnov: "New Armed Incidents Have Occurred on the Tajik-Afghan Border"]

[Text] *The worsening of the situation on the Tajik-Afghan border was the main subject of the talks during Russian Minister of Foreign Affairs Andrey Kozyrev's visit to Tajikistan on 8 April. Kozyrev's visit to a border guard detachment at Pyandzha indicates the Russian leadership's serious concern about the increase in tension between the government troops of Tajikistan and opposition forces and the involvement of Russian servicemen in this conflict. A KOMMERSANT-DAILY correspondent learned from informed sources that the Russian government's concern may be used by the heads of governments of the former republics of the USSR to obtain material assistance to restore the economies of their countries. Thus, in talking about the results of his trip to Khatlon*

Oblast, the head of government of Tajikistan, Mr. Abdullodzhonov, noted that it would take 220 billion rubles to restore the oblast's economy. It also follows from his statements that the republic plans to get these funds "through credits from Russia and distant foreign countries" against silver mines.

Several hours after Kozyrev left Tajikistan for Moscow, an armored column of the Kulyab Motorized Rifle Regiment of the 201st Russian Motorized Rifle Division was shelled. Such intensification of the aggressiveness of antigovernment forces of Tajikistan, supported by groups of Afghan fighters, suggests the thought of a purposeful policy of escalation of the conflict by drawing the Russian side into the conflict.

The head of the government of Tajikistan, Abdullodzhonov, was also subjected to an attack—his helicopter was fired upon on the territory of Khatlon Oblast, which has suffered to the greatest extent from the military operations. The prime minister himself informed journalists of this at a press conference in Dushanbe upon his return from the south of the republic. When asked about details, he tried to respond with a joke: "Evidently, we flew along the border too long."

An extended stay on Tajikistan's border with Afghanistan may threaten the security not only of the prime minister of Tajikistan. The Russian border guards, who have sort of ended up surrounded by warring groupings, are suffering heavy losses: on the part of Afghanistan—constant attempts by groups of Afghan fighters to penetrate the border; on the part of Tajikistan—increasing activeness of armed Islamic-type antigovernment formations.

Thus, on the night of 8/9 April (after midnight), the Russian border troops subunit [zastava] Iyokhchipun was subjected to a heavy shelling by assault rifles and grenade launchers. As was reported at the headquarters of the Group of Russian Border Troops in Tajikistan, three grenades exploded on the territory of the subunit. As a result, two servicemen received slight wounds caused by projectile fragments. In the opinion of Russian border guards, among the attackers were about 40 fighters of the Islamic Party of the Rebirth of Tajikistan under the command of Mullah Abdurrahim and also Afghan mujahedin. The shelling came from the territory of Afghanistan and served as cover for a second group of fighters (approximately 20 people) that tried to cross over into the territory of Tajikistan. However, according to the Russian border guards, "having encountered a decisive rebuff, the enemy suffered losses in personnel and withdrew into Afghanistan."

This was not the only armed incident on the Tajik-Afghan border. Yesterday, at about 10:00 in the morning, an armed attack was made from the Afghan side on an armored column of the Kulyab Motorized Rifle Regiment. The column was moving in the direction of the Iyokhchipun Zastava, Shuroabadskiy Rayon, where one of the subunits of the Moscow Border Guard Detachment is stationed on the border with Afghanistan.

The shelling, resulting in damage to one of the tanks, came from the territory of the Afghan village of Guzun. There were casualties among the crew members of the tank that was hit.

However, despite these tragic events, the Russian servicemen taken prisoner on 5 April on the territory of the Khorog Border Guard Detachment were freed as a result of steps taken by the command of the Group of Russian Border Troops in Tajikistan and Russia's Ministry of Security. They were delivered to the territory of Tajikistan last Thursday. The representative of the press bureau of Russia's Border Troops refrained from giving any details on this operation. He merely reported that all 10 Russian border guards and also the driver, who worked in the Russian Army as a civilian employee, returned to their unit yesterday.

As KOMMERSANT-DAILY already reported on 7 and 8 April, these Russian border guards were captured when they were driving two vehicles in the border territory of Banchskiy Rayon of Gornyy Badakhshan. According to information from an operations group of the Border Troops, the fighters from the Party of Islamic Rebirth of Tajikistan, passing themselves off as local residents, initially stopped the vehicles with border guards and then suddenly attacked them. The attackers were supported by an armed group of Afghan mujahedin. The surprise of the attack and the considerable numerical superiority of the fighters prevented the border guards from using weapons and giving them a rebuff.

It was learned from reliable sources that the capture of Russian border guards was thought up so they could later be exchanged for the Tajik fighters detained earlier for violating the border.

It was reported at the Border Troops press center that the commander of the 12th Border Brigade of Afghanistan, Major General Abdulkadyr, helped in returning the captured Russian servicemen home. A large unit of this brigade controls precisely that section of the border where the Russian border guards were kept under arrest. General Abdulkadyr expressed to the representatives of the Russian government his concern over the complication of the situation on the Afghan-Tajik border and promised that such outings by fighters in his area of responsibility "will be stopped in every way possible in the future."

The representative of the Group of Russian Border Troops in Tajikistan stated on Friday that the command will take all the additional steps necessary to ensure the safety of Russian servicemen in this area.

SECURITY SERVICES

Russian Federation Border Troops Chief Shlyakhtin Interviewed

PM2805133993 Moscow KRASNAYA ZVEZDA in Russian
28 May 93 pp 1-2

[Interview with Vladimir Ivanovich Shlyakhtin, deputy minister of security and commander of the Russian

Federation border troops, by Oleg Falichev; date and place of interview not stated: "Open Borders Are So Far Not for Us"—first four paragraphs are introduction]

[Text] Vladimir Ivanovich Shlyakhtin was born in 1940 in Rostov Oblast. He is a Russian.

In 1960 he graduated from the border guards school and in 1968 from the M.V. Frunze Military Academy and in 1978 from the USSR Armed Forces General Staff Academy.

He has served in the Transcaucasus, Central Asian, and Transbaykal border districts in capacities ranging from detachment deputy chief to district commander. From 1990 through 1992 he was chief of staff of the border troops. Since 1992 he has been deputy minister of security and commander of the Russian Federation border troops. He is a colonel-general.

He is married with two children.

[Falichev] Vladimir Ivanovich, you are the first commander of the Russian border troops, which are a year old 12 June. But the Russian border as such may be said still to be only being formed... An unusual situation, you will agree...

[Shlyakhtin] Perhaps. But only at first glance. In place of the former union republics since the collapse of the USSR a number of independent states have formed. Only administrative territorial borders existed between them. On 1 April 1993 the Russian Federation Supreme Soviet adopted the law "on the Russian Federation State Border." The decree on its introduction until the conclusion of treaties on the passage of the Russian Federation state border with adjacent states which are former USSR republics lends the border with them the status of a state border.

The Russian Federation border troops created by the Russian president's 12 June 1992 edict with the adoption of the Law received a firm legal basis and are fulfilling tasks on what is now the Russian Federation state border. But in addition they are guarding a number of sectors of the external borders of Georgia, Armenia, Tajikistan, and Kyrgyzstan. And herein lies the considerable complexity of the border situation..

It is even more complicated for a young chief at a Russian border detachment serving on, for instance, the former Soviet-Turkish border on the territory of sovereign Georgia to understand these complex realities. What can we say to him in reply to the question: "Whose border is he actually guarding, whose interests does he represent? Russia's?" But he is separated from Russia by sovereign Georgia. Is he defending Georgia's interests? But he is an officer in the Russian border troops.

I do not even mention the fact that numerous illegal actions are being noted against border guards, as are cases of armed attacks on border details and detachments and the seizure of weapons and military property. In 1993 on Georgian territory alone there were 49 cases

of illegal and openly hostile actions against Russian border guards, including armed attacks, as a result of which two border guards were killed and four were wounded. Nonetheless there is just one answer to that question: In defending the external borders of some states of nearby foreign parts we are defending the interests of Russia, the interests of the Fatherland.

[Falichev] Obviously we must talk of the status of our border guards and the formation of the legal basis for their presence abroad. After all, unfortunately few people now have any idea of where Russia's borders are.

[Shlyakhtin] That is so. That is why we awaited with impatience the law "On the Russian Federation State Border." It sets the record straight on a lot of things, so to speak. Article 2 of the first section, for instance, clearly states: "The Russian Federation state border is the RSFSR [Russian Soviet Federated Socialist Republic] border enshrined by existing international treaties and legislative acts of the former USSR and the Russian Federation's borders with adjacent states which have not been made official as regards international law will be subject to enshrinement in treaties." The troops stationed on the territory of states which are former union republics also guard the borders on treaty terms.

But in general the establishment of the border troops may be said to be under way: Alongside the formation of new table of organization structures of the troops and the improvement of existing ones a legal base is being created, negotiations processes are being continued with a number of states on border issues and at the same time the direct guard of existing borders and those which are being created is being organized.

[Falichev] As we know, the collapse of the USSR entailed many very diverse problems connected with the formation and establishment of the Russian state. In this connection today the actual conditions for the border troops' fulfillment of their tasks are obviously changing radically.

[Shlyakhtin] As a result of events in recent years there has been a change in the geopolitical situation, which has led to the destruction of the system for the guarding of the border and border and customs control which used to exist. You can imagine: About 14,000 km of newly formed Russian borders were not backed up legally and were not provided with facilities. Of the 10 border districts which used to guard the borders of the former USSR we have only five left.

While the extent of the borders of Russia and the former USSR are almost the same (over 60,000 km) the numerical strength of the Russian border guards has been reduced by 30,000 men. Essentially up to 30 percent of the troops' facilities with the engineering and technical equipment, elements of the control and vital services system, and the housing and barracks stock remained beyond Russia in the newly formed states. The absolute

majority of checkpoints equipped in conformity with international standards on the Western and Southern salients have been lost...

[Falichev] But perhaps there is no need to regret this particularly. Formerly it was said of us that we had shielded ourselves from the whole world with an "iron curtain." Alas, that was the case. So now that the cold war is behind us do we need borders at all? You can see that in Europe they will soon remove them completely...

[Shlyakhtin] We must not make a mistake on this score. In contrast to Europe we live in a country of nascent democracy and so far we have what we have. In political games the absence of a border is no more than talk. So that we have had, have, and will have a border for the time being. What its admission procedure and customs laws should be is another matter. As far as the latter is concerned, the growing scale of damage to Russia's political, economic, and military interests caused by the openness of a considerable part of its border has recently created a real threat to the Russian Federation's sovereignty, territorial integrity, and state security. It is surprising that Estonia has become almost the leading exporter of nonferrous metals. Where are its deposits of these metals? The answer is—on the surface...

There has also been a marked increase in intelligence activity across the border by the special services of a number of states aimed at keeping track of the situation on the territory of the former USSR. The stance of individual adjacent countries on territorial problems has become tougher. Here are examples. In 1992 over 7,000 border violators were arrested. Contraband worth over 64 million rubles, 320 kg of narcotics, and over 1,200 weapons were seized. This year the figure is over 1,500 border violators, contraband worth about 1.5 billion rubles, and 34.8 kg of narcotics...

[Falichev] Vladimir Ivanovich, we have without wanting to switched to results of the border troops' activity over the past year. What are they?

[Shlyakhtin] I shall touch on the main thing really briefly. What, for instance, has been done on the practical plane?

The withdrawal of border troops from Azerbaijan has been fully completed and almost completed from the Baltic states. The guard of the border with Estonia, Latvia, and Lithuania has been organized. The foremost steps have been taken to guard the border with Georgia. Measures are being taken appropriate to Ukraine's actions for the customs and border control on the Russian-Ukrainian border.

Talks have been held and the relevant agreements have been signed on border questions with Azerbaijan, Armenia, Kyrgyzstan, Turkmenistan, and Kazakhstan. The negotiations process with Georgia is proceeding, albeit slowly. On 25 May this year an agreement was signed on the status of the Russian border troops in Tajikistan. A commission has been created to outline the

border with Lithuania and the demarcation of the border with the PRC is under way.

I stress that questions of the guarding of the border and the establishment and development of the Russian Federation border troops are under the constant control of the president, the Supreme Soviet, and the government of Russia. As early as this year they have been examined at the security council and government collegium. I particularly want to note the role of the Security Ministry leadership headed by Army General V. Barannikov, who pays great attention to the establishment of Russia's border troops. In the interests of ensuring the deployment of our formations and units on the new borders, in accordance with the government decision we are elaborating a federal program for the formation and equipping of the state border and the organizational building and development of the Russian Federation border troops for the period through 2000. It is important that Russia is rejecting the principle of building an equal guard for the borders following the traditional scheme of tough troop cover all along its length. On the basis of the special features of the situation and the state of interstate relations, the approach here will be strictly differentiated and the actions of Russia's border troops will be suited to the actions of the adjacent side. Funds will be earmarked for all this.

But there is a shortage of manpower. For the first time in the entire history of the border troops we have a shortage of rank and file personnel. The reason? The same as it is for everyone. You know it well.

[Falichev] You mentioned Tajikistan—only recently an open wound of the CIS. One cannot fail to understand the problems and difficulties which have befallen the republic. But sometimes you hear questions about the appropriateness of our presence there...

[Shlyakhtin] A complex question. At the request of the Republic of Tajikistan leadership and in connection with the decision made by the Russian president, since August 1992 we have had responsibility for guarding the Tajik-Afghan section of the border. Despite the efforts of the republic's leadership to restore peace and national consensus, the situation here has become extraordinarily acute and tense. Units and subunits of the troops have essentially found themselves at the epicenter of the armed confrontation between the sides.

Attempts to smuggle arms and to transfer groups of Islamic Revival Party thugs together with Afghan mujahedin onto Tajikistan's territory have not ceased. The border has essentially become a region of active hostilities. This year alone the Russian border guards entered into combat clashes with armed groups on over 40 occasions.

But as I have already said we realize that the presence of our border troops and their fulfillment of their set tasks are essential primarily in the interests of Russia's security. In addition I think we must remember that there are many Russians living in Tajikistan itself and in other

Central Asian republics. Is it in our interests to turn them into refugees? Finally, there was the decision of the CIS heads of state to render aid to Tajikistan in guarding the border with Afghanistan. And Russia cannot remain indifferent to that but, on the contrary, was the first to go to its assistance.

[Falichev] And one last question, Vladimir Ivanovich. As we can see, the border troops have a great many concerns today. Nonetheless, what will be the priority avenues in your service and difficult work in the immediate future? In the age of detente guidelines will obviously move from spycatching toward the struggle against economic law violations?

[Shlyakhtin] Considering the situation which is taking shape and guided by the concept for guarding the border, I would rate the following as priority avenues in the border troops' activity. Legal backup for establishing the state border; the creation of conditions for the redeployment, formation, and deployment of border troops on new borders; the organization of the protection of the Russian Federation state border; the full staffing of the troops with professionally trained cadres; the ensuring of social protection for servicemen and members of their families.

Whether we want it or not the border is the visiting card of a self-respecting state. No one intends to reinforce it in its former capacity as an "iron curtain." But it is a filter for any impurity while the border troops are the first link in the system of safeguarding state security. And the fact that they were recently returned to the Russian Security Ministry was the only correct decision on the part of the Russian Federation leadership.

Legislation on Russian State Frontier

Border Guards Aide Explains Law

935D0378A Moscow FEDERATSIYA in Russian No 47, 27 Apr 93 (signed to press 26 Apr 93) p 2

[Interview with Major General N. N. Bordyuzha, deputy commander of border troops of the Russian Federation, by Vladimir Potapenko; date and place not given: "Who Should Protect Borders?"]

[Text] Today our newspaper publishes the Law on the State Frontier of the Russian Federation. Major General N. N. Bordyuzha, deputy commander of border troops of the Russian Federation, talked with a FEDERATSIYA correspondent about the problems of and prospects for the training of those who will have to implement this law.

[Bordyuzha] We have been eagerly waiting for this law. After all, border troops did not have a legal base for many directions of activity. This especially complicated work at the new sections of the border, with the Baltic countries in particular. Without this law all our attempts to organize the protection of Russian borders at least somehow proved to be futile. I think that now everything will be in its place.

[Potapenko] Nikolay Nikolayevich, there is a great deal of news in the daily life of border troops. I am talking not only about the law. Russia's very borders are now different, although their length is by no means much shorter than that of former USSR borders.

Our newspaper has often talked about the difficulties encountered by border guards who establish themselves at new places: There is a shortage of machinery and equipment and at times there is no place to accommodate not only families, but even personnel. Tents, barracks... It is no secret that many officers do not see prospects and leave for civilian life. How do matters stand with the training of replacements for those who leave?

[Bordyuzha] As is well known, there were three schools for border guards: the Babushkin School in Moscow, the Golitsyno School near Moscow, and the Alma-Ata School. In principle, these schools enabled the command to staff border troops under very calm conditions.

I must said right away, without any boasting, that the officer corps of border guards has always been noted for the highest degree of training.

Everything was perfect, everything was marvelous until the processes connected with restructuring and then with the collapse of the Union began.

Personnel leave Russia's border troops not only for civilian life. Many Ukrainian, Belarusian, and Azerbaijani officers leave to protect the borders of their new states. The understaffing of the officer corps is largely connected with this.

Of course, the two schools that have remained in Russia—we lost the Alma-Ata School—do not make up for the personnel shortage in a full volume. In this connection we have raised the question of the establishment of a new school for border guards before the government...

[Potapenko] Nikolay Nikolayevich, quite recently I have had occasion to visit the southern borders of the former Union, in particular Lenkoran. The Russian border guard detachment was withdrawn from there. The leadership of the new, Azerbaijani, one impatiently awaits replacements from the same Moscow and Golitsyno schools. It has been determined in advance who of the Azerbaijani graduates will serve where and in what post...

Apparently, the situation with other CIS countries is similar. Don't you see a paradox in the fact that Russian schools train personnel for our close neighbors, but nowhere for themselves?

[Bordyuzha] This was a fundamental policy—to select secondary school graduates of various nationalities from all regions for schools. Of course, to this day we have many students who have been called up from Azerbaijan, Georgia, Armenia, and, especially, from Ukraine and Belarus.

This year about 100 such graduates raise the question of assigning them to service in national border troops. We do not hinder anyone... Moreover, we grant commanders or leaders of corresponding security structures of CIS countries the right to award initial officer ranks. That is, the chairman of Ukraine's Committee on National Security, for example, awards initial officer ranks to Ukrainians.

That is why the question of a new school has arisen.

[Potapenko] Where will it be located?

[Bordyuzha] Our proposal—in the Far Eastern Region at the base of the Khabarovsk Military Construction School. However, there is a serious opposition on the part of the structures to which it belongs. They have their own plans on this score. The problem will be solved at the government level.

One thing is indisputable: A new school for training officers for Russia's border troops is needed as we need air. The fact that it should be established in the Far East is also indisputable.

[Potapenko] If possible, a few words about the quality of the training of border guard officers.

[Bordyuzha] You know that reform of Russian higher schools has begun. It presupposes multilevel training. Not a single educational institution of military specialization is ready for this. We will do a great deal in order to approve new programs ensuring the observance of reform requirements. Now our graduates will receive diplomas of bachelors of jurisprudence, diplomas of jurists with the right to teach in higher and secondary educational institutions, and diplomas of specialists of the migration-customs service. True, the training period increases from 4 to 5 years.

I will say more. A proposal to convert schools for border guards into institutes was sent to the government. This has a whole set of advantages—both improvement in the quality of the teaching staff and training and enhancement of prestige.

[Potapenko] And in these transformed educational institutions, as before, Russia will train officer cadres for our close neighbors?

[Bordyuzha] Today we have many applications and requests to organize training for national border troops. We cannot respond to these applications positively. We have already discussed the reasons. However, taking into consideration that in CIS countries there is also a huge shortage of officer cadres, we are studying the question of establishing a corresponding center for training border troop officers of the former Union at the base of the training center of Russian Federation border troops in Bishkek. Armenia and Tajikistan have already submitted applications. Training will be conducted there according to an accelerated and reduced program and on a compensatory basis—simply for money. Otherwise, we will not be able to maintain this center. After all, 1 year of training one student in our schools today costs as

much as 1 million rubles. For now. You know what is happening with the economy.

[Potapenko] Nikolay Nikolayevich, today a great deal is being said and written about the difficulties with the call-up for army service. Many young people simply dodge it. Does this situation not affect the staffing of the student body in schools for border guards?

[Bordyuzha] Here is only one example: Last year the competition for the Babushkin School—four applicants for one vacancy; for the Golitsyno School—three and a half. We also predict the same competition for this year. There are quite many interested persons. However, we try to see to it that representatives of Russia's all nationalities study with us. In coordination with the Council of Russia's Cossacks we will begin the selection of representatives of the Cossacks from all regions for schools. They will include Far Eastern, Don, Terek, and Kuban Cossacks...

There is an understanding that from every Cossack troop 10 applicants will be sent in accordance with the general practice, without any priorities. The question of the Cossacks' participation in the protection of borders and of the establishment of Cossack units is now being raised persistently. Naturally, we must help to staff them with skilled and competent cadres.

[Potapenko] Will it not turn out that during distribution, for example, a native of Kuban will find himself in Chukotka and a person from the Far East, in the Elbrus area?...

[Bordyuzha] This used to happen. Now, however, we proceed from the fact that the officer has fewer problems and concerns. He serves better near his native place. However, the officer must grow. We must promote him. And this is not always possible in the region from which he is called up and where his relatives live. Therefore, officers, of course, travel. However, as an analysis shows, ultimately they come back to their native shores.

[Potapenko] How do our economic difficulties affect students' training? I have in mind food, money allowance, and so forth.

[Bordyuzha] Despite all the difficulties, the student receives everything that he is supposed to receive—bread, butter, and meat. Everything according to the norm, no matter how much this may cost rear structures. Control is efficient and tight here.

With regard to money allowances, first- and second-course students receive 4,000 rubles. If one is a good student, he receives 5,000 and, if one is an excellent student, 6,000. That is, we provide incentives for study and the quality of training.

In brief, there are no obstacles to training cadres capable of ensuring the fulfillment of the just published Law on the State Frontier of the Russian Federation.

Text of Legislation

935D0378B Moscow *FEDERATSIYA* in Russian No 47,
27 Apr 93 (signed to press 26 Apr 93) pp 4-5

[Russian Federation Law on the State Frontier of the
Russian Federation]

[Text]

SECTION I. GENERAL PROVISIONS

Article 1. State Frontier of the Russian Federation

The state frontier of the Russian Federation (hereinafter, the state frontier) is a line and a vertical surface passing along this line, which determine the limits of state territory (land, waters, mineral resources, and air space) of the Russian Federation, that is, the space limit of state sovereignty of the Russian Federation.

Article 2. Principles of Establishment and Change of Passage Through the State Frontier and of Establishment and Maintenance of Legal Relations at the State Frontier

The RSFSR frontier affirmed by existing international treaties and legislative acts of the former USSR is the state frontier of the Russian Federation. Frontiers of the Russian Federation with contiguous states not formulated on the basis of international law are subject to their treaty affirmation.

The Russian Federation, during the establishment and change of the passage through its state frontier, establishment and maintenance of relations with foreign states at the state frontier, and regulation of legal relations in frontier regions (water areas) of the Russian Federation and on international communication routes passing on Russian territory, is guided by principles of:

- safeguarding the security of the Russian Federation and international security;
- mutually advantageous all-around cooperation with foreign states;
- mutual respect for the sovereignty and territorial integrity of states and inviolability of state frontiers;
- peaceful settlement of frontier problems.

Article 3. Protection of the State Frontier

The protection of the state frontier is an integral component of the state system for safeguarding the security of the Russian Federation and lies in the implementation of political, legal, economic, military, operational, organizational, technical, ecological, sanitary, and other measures:

- to prevent an unlawful change of the passage through the state frontier;

- to ensure the observance by juridical and natural persons of the regime of the state frontier, the boundary regime, and the regime at points of passage through the state frontier;

- to protect at the state frontier other vitally important interests of the individual, society, and the state from foreign and domestic threats.

The Russian Federation cooperates with foreign states in the sphere of protection of the state frontier on the basis of international treaties.

The authority of bodies of state power and administration in the sphere of protection of the state frontier is determined by this law, by other legislative acts of the Russian Federation, and—in cases provided for by the legislation of the Russian Federation—also by the legislation of republics within the Russian Federation and by legal acts of krays, oblasts, the autonomous oblast, autonomous okrugs, and the cities of Moscow and St. Petersburg.

Article 4. Legislation on the State Frontier

Legislation on the state frontier is based on the Constitution (Basic Law) of the Russian Federation, as well as on international treaties of the Russian Federation, and consists of this law and other legislative acts of the Russian Federation and republics within the Russian Federation adopted in accordance with it.

If rules other than those contained in this law and in other legislative acts of the Russian Federation on the state frontier are established by an international treaty of the Russian Federation, rules of the international treaty are applied.

SECTION II. ESTABLISHMENT, CHANGE OF PASSAGE, AND DESIGNATION OF THE STATE FRONTIER

Article 5. Establishment and Change of the Passage Through the State Frontier

1. The passage through the state frontier is established and changed by international treaties of the Russian Federation and by decisions of the Russian Federation Congress of People's Deputies.

Documents on changes and refinements of the passage through the state frontier at a locality made by way of a check of the state frontier on the basis of international treaties of the Russian Federation are put into effect in accordance with the legislation of the Russian Federation.

2. The passage through the state frontier, unless otherwise stipulated by international treaties of the Russian Federation, is established:

- a) on land, along characteristic points, relief lines, or clearly visible landmarks;

b) on sea, along the external limit of the territorial waters (territorial sea) of the Russian Federation;

c) on navigable rivers, along the middle of the river's main fairway or thalweg; on nonnavigable rivers and streams, along their middle, or the middle of the river's main branch; on lakes and other reservoirs, along an equally spaced, median, straight, or another line connecting the outlets of the state frontier to the shores of the lake or another reservoir. The state frontier passing along a river, stream, lake, or another reservoir is not moved when the outline of their banks or water level changes, or when the river or stream channel diverts in one direction or another.

d) on reservoirs of hydraulic power systems and other artificial reservoirs, in accordance with the line of the state frontier passing at the locality before its inundation;

e) on bridges, dams, and other structures passing across rivers, streams, lakes, and other reservoirs, along the middle of these structures, or along their technological axis, irrespective of the passage of the state frontier on water.

3. The territorial waters of the Russian Federation include coastal sea waters at a width of 12 nautical miles counted off from the line of the greatest ebb both on the mainland and on islands belonging to the Russian Federation, or from direct initial lines connecting points, the geographic coordinates of which are established by the Government of the Russian Federation and are announced in IZVESHCHENIYA MOREPLAVATELYAM [NOTICES TO NAVIGATORS].

In other cases another width of the territorial waters of the Russian Federation can be established by international treaties of the Russian Federation and, in the absence of treaties, in accordance with the generally accepted principles and norms of international law.

4. The internal waters of the Russian Federation include:

a) marine waters located toward the coast from the initial lines accepted for counting off the width of the territorial waters of the Russian Federation;

b) waters of ports of the Russian Federation limited by a line passing through points of hydraulic and other port structures most remote in the direction of the sea;

c) waters of gulfs, bays, inlets, and lagoons, the shores of which belong completely to the Russian Federation, up to the straight line drawn from shore to shore at the place of the lowest ebb, where on the side of the sea one or several passages are formed for the first time, if the width of each of them does not exceed 24 nautical miles;

d) waters of gulfs, bays, inlets, lagoons, seas, and straits historically belonging to the Russian Federation;

e) waters of rivers, lakes, and other reservoirs, the banks of which belong to the Russian Federation.

Article 6. Designation of the State Frontier

The state frontier at a locality is designated by clearly visible border marks.

The description of and procedure for the installation of borders marks are determined by international treaties of the Russian Federation and by decisions of the Government of the Russian Federation.

SECTION III. REGIME OF THE STATE FRONTIER

Article 7. Upkeep and Establishment of the Regime of the State Frontier

The regime of the state frontier includes rules for the:

- upkeep of the state frontier;
- crossing of the state frontier by persons and transport facilities;
- transfer of goods and animals across the state frontier;
- passage of persons, transport facilities, goods, and animals through the state frontier;
- conduct of economic, fishing, and other activity at the state frontier;
- resolution of incidents connected with a violation of the indicated rules with foreign states.

The regime of the state frontier is established by this law, by other legislative acts of the Russian Federation, and by international treaties of the Russian Federation.

With due regard for mutual interests of the Russian Federation and contiguous states individual rules of the regime of the state frontier may not be established and the nature of the established rules can be simplified.

Article 8. Upkeep of the State Frontier

The rules for the upkeep of the state frontier regulate the procedure for the preservation and maintenance of border marks in good condition and their control inspections, for the equipment and upkeep of border openings, and for the performance of checks of the passage through the state frontier jointly with a contiguous state.

Documents of joint checks of the passage through the state frontier, which do not contain its changes, are approved by the Government of the Russian Federation.

In the interests of a proper upkeep of the state frontier, in accordance with the procedure established by the legislation of the Russian Federation, a land strip passing directly along the state frontier on land and, if necessary, along the bank of the Russian part of the waters of a boundary river, lake, or another reservoir is assigned to border troops of the Russian Federation (hereinafter, border troops) for indefinite (permanent) use in accordance with the established norms.

Article 9. Crossing of the State Frontier by Persons and Transport Facilities

The crossing of the state frontier on land by persons and transport facilities is made on international railroad and motor communication routes, or at other places determined by international treaties of the Russian Federation or by decisions of the Government of the Russian Federation. These documents can determine the time of crossing of the state frontier and establish the procedure for moving from the state frontier to points of passage through the state frontier and in the opposite direction. At the same time, the disembarkation of people, unloading of goods and animals, and their acceptance by transport facilities are not permitted.

By the point of passage through the state frontier is meant the territory within the limits of a railroad and bus terminal or station, a sea or river port, an airport, or an airfield open for international communications (international flights), as well as another especially equipped place, where border and, if necessary, other types of control and passage of persons, transport facilities, goods, and animals through the state frontier are carried out.

Border troops are granted the right to use—in coordination with the authorities of states contiguous with the Russian Federation—another procedure for the crossing of the state frontier by servicemen of these troops and other persons during their performance of obligations concerning the protection of the state frontier.

Nonnaval vessels and naval ships cross the state frontier on the sea, rivers, lakes, and other reservoirs in accordance with this law and international treaties of the Russian Federation.

Foreign nonnaval vessels and naval ships in the territorial waters of the Russian Federation use the right of peaceful passage, provided they observe international treaties and the legislation of the Russian Federation. A passage is peaceful if they do not violate peace, good order, or the security of the Russian Federation.

A peaceful passage through the territorial waters of the Russian Federation is made for the purpose of crossing them without entry into the internal marine waters of the Russian Federation, or for the purpose of passage into the internal waters and ports (roadsteads) of the Russian Federation, or departure from them into the open sea.

When making a peaceful passage, foreign nonnaval vessels and naval ships should proceed along sea corridors, or traffic segregating schemes (systems) at the places where they are installed or prescribed by Russian competent bodies, or can follow the ordinary courses recommended by these bodies.

Navigation on boundary rivers, lakes, and other reservoirs with the crossing of the state frontier without entry into ports (roadsteads) of the Russian Federation and

contiguous states is regulated by treaties of the Russian Federation with contiguous states.

The following [except for cases specified by this law] are prohibited to nonnaval vessels proceeding from the state frontier to points of passage through the state frontier and back and to foreign nonnaval vessels during a peaceful passage without entry into the internal waters of the Russian Federation and navigation in the Russian part of the waters of boundary rivers, lakes, and other reservoirs without entry into ports (roadsteads) of the Russian Federation:

- a) entry into ports (roadsteads) of the Russian Federation not open by the Government of the Russian Federation for international communications and for entry of foreign vessels;
- b) departure from ports (roadsteads) not open by the Government of the Russian Federation for international communications;
- c) entry into regions prohibited for navigation, about which the general public was informed;
- d) stopping, disembarkation (landing) of people, and unloading (loading) of goods and animals at places not established for this, or at established places, but without the appropriate authorization for this, launching of floating craft, lifting of aircraft into the air and their reception on board, and conduct of fishing, research, and other activity;
- e) other actions prohibited by the legislation of the Russian Federation and by international treaties of the Russian Federation.

Owners of foreign vessels with nuclear engines, or of vessels transporting radioactive and other substances dangerous in their nature, the list of which is determined by the Government of the Russian Federation, in order to ensure civil responsibility for damage due to the pollution of the marine environment or the coast of the Russian Federation, must have insurance or other financial security for such responsibility in amounts calculated in accordance with the legislation of the Russian Federation.

Foreign naval ships, as well as nonnaval submarines and other underwater transport facilities, also make a peaceful passage through the territorial waters of the Russian Federation in accordance with the procedure established by the Government of the Russian Federation. At the same time, submarines and other underwater transport facilities should proceed on the surface and under their flag.

Aircraft cross the state frontier through especially assigned air flight corridors with the observance of the rules established by the Government of the Russian Federation and published in documents on air navigation information. The crossing of the state frontier outside the assigned air corridors, except for cases indicated in point 6 of this

article, is permitted only with the authorization of the Government of the Russian Federation.

The following (except for cases specified by this law) are prohibited to aircraft proceeding from the state frontier to points of passage through the state frontier and back, as well as during a transit flight across the air space of the Russian Federation:

a) landing in airports and airfields of the Russian Federation not open by the Government of the Russian Federation for international flights;

b) take-off from airports and airfields not open by the Government of the Russian Federation for international flights. In individual cases, during special international flights, the take-off of aircraft from the Russian Federation, as well as their landing after entry into the Russian Federation, can be carried out in airports and airfields not open for international flights only with the authorization of the Russian Federation Ministry of Transport or the Russian Federation Ministry of Defense in coordination with the Russian Federation Ministry of Security.

c) flight into regions prohibited for flights, about which the general public was informed;

d) other actions prohibited by the legislation of the Russian Federation and international treaties of the Russian Federation.

In the interests of safeguarding the security of the Russian Federation, as well as at the request of foreign states, in accordance with the decision of the Government of the Russian Federation, the crossing of the state frontier at its individual sections can be temporarily restricted or stopped with notification to the authorities of interested states.

During emergency situations caused by major accidents, disasters, or natural calamities emergency rescue and repair formations (forces) cross the state frontier for the localization and elimination of such situations in accordance with the procedure determined by international treaties of the Russian Federation and by decisions of the Government of the Russian Federation.

A forced crossing of the state frontier by persons and transport facilities on land, entry of foreign nonnaval vessels and naval ships into the territorial waters of the Russian Federation and into the Russian part of the waters of boundary rivers, lakes, and other reservoirs, and a forced flight of aircraft into the air space of the Russian Federation made owing to emergency circumstances—an accident, a crash, a natural calamity, ice conditions threatening the safety of the vessel, towing of damaged vessels (ships), delivery of rescued people, and rendering of urgent medical aid to crew members or passengers, as well as for other forced reasons—are not violations of the rules for the crossing of the state frontier.

In case of a forced crossing of the state frontier, or a forced nonobservance of the procedure for stay in the

waters and air space of the Russian Federation determined by this law, the vessel captain, the naval ship commander, and the aircraft commander must immediately report this to the administration of the nearest Russian sea (river) port, airport, or airfield and subsequently act according to its instructions, or the instructions of the naval ship, sea or river vessel, or aircraft of the Russian Federation, which arrives to render assistance or to find out the circumstances of what happened.

Article 10. Transfer of Goods and Animals Across the State Frontier

The transfer of goods and animals across the state frontier is made at places and in accordance with the procedure established by international treaties of the Russian Federation, by the legislation of the Russian Federation, and by decisions of the Government of the Russian Federation.

Article 11. Passage of Persons, Transport Facilities, Goods, and Animals Through the State Frontier

The passage of persons, transport facilities, goods, and animals through the state frontier is made at the established points of passage through the state frontier and consists in the recognition of the legality of the crossing of the state frontier by persons and transport facilities, which have arrived at the territory of the Russian Federation, and of the transfer of goods and animals across the state frontier to the territory of the Russian Federation, or in the authorization for the crossing of the state frontier by persons and transport facilities leaving the Russian Federation and for the transfer of goods and animals across the state frontier outside the Russian Federation.

The existence of valid documents for the right of persons' entry into the Russian Federation, or their departure from the Russian Federation, and of documents for transport facilities, goods, and animals is the basis for the passage of persons, transport facilities, goods, and animals through the state frontier.

If the grounds specified by legislative acts of the Russian Federation exist, persons with valid documents are not subject to passage through the state frontier.

A treaty of the Russian Federation with a contiguous state can establish a simplified procedure for the passage of citizens of the Russian Federation and of a contiguous state through the state frontier in the part of the determination of documents for the right of departure from the Russian Federation and entry into the Russian Federation.

The passage of persons, transport facilities, goods, and animals through the state frontier includes border control (examination of documents for the right of entry into the Russian Federation or departure from the Russian Federation and inspection of transport facilities for the purpose of uncovering violators of the rules for the crossing of the state frontier) and, if necessary, customs,

sanitary-quarantine, veterinary, phytosanitary, and other types of control as well.

The content, means, and methods of control and the procedure for their application are established on the basis of the law by normative acts of corresponding ministries and departments of the Russian Federation coordinated with the Russian Federation Ministry of Justice and in the part of safeguarding the safety of life and health of persons, animals, and plants, in addition, with the Russian Federation Ministry of Health and other interested ministries and departments of the Russian Federation.

The passage through the state frontier of Russian aircraft performing special international flights from airports or airfields not open for international flights, as well as of foreign and Russian aircraft making forced landings at unestablished places, is carried out by federal bodies of state security jointly with the administration of airports and airfields, or with the command of aviation units of the Armed Forces of the Russian Federation with subsequent notification to border troops and other interested bodies of the Russian Federation.

Article 12. Opening of Points of Passage Through the State Frontier

Points of passage through the state frontier are established by the Government of the Russian Federation on the recommendations of Russian Federation ministries and departments and subjects of the Federation coordinated with border troops with due regard for the interests of contiguous and other foreign states.

The opening of a point of passage through the state frontier is carried out after the construction, equipment, and acceptance for operation by an interested Russian Federation ministry or department, or by a subject of the Federation, of appropriate buildings, premises, and structures according to plans coordinated with border troops, as well as by customs and other bodies participating in control at the point of passage through the state frontier. The construction and equipment of the indicated facilities are carried out with the funds of the republican budget of the Russian Federation and of budgets of subjects of the Federation and with the funds of interested ministries and departments of the Russian Federation.

Article 13. Conduct of Economic, Fishing, and Other Activity at the State Frontier

Economic, fishing, and other activity connected with the crossing of the state frontier and affecting the interests of the Russian Federation or foreign states in another way, which is carried out by Russian and foreign juridical and physical persons, including jointly, directly at the state frontier or near it on the territory of the Russian Federation, must not:

—inflict damage on the population's health and on the ecological and other security of the Russian Federation and of other contiguous foreign states, or contain a threat of inflicting such damage;

—create obstacles to the maintenance of the state frontier.

The activity indicated in the first part of this article is carried out in accordance with international treaties of the Russian Federation or other agreements with foreign states, with the observance of the rules for the crossing of the state frontier and with notification to border troops about the places and time of crossing of the state frontier and performance of operations and about the number of participants and of the used fishing and other vessels, transport and other facilities, and mechanisms.

Article 14. Resolution of Incidents Connected With a Violation of the Regime of the State Frontier

The procedure for the resolution of incidents connected with a violation of the regime of the state frontier and their placement under the jurisdiction of border representatives of the Russian Federation, the Russian Federation Ministry of Defense, or the Russian Federation Ministry of Foreign Affairs are determined by treaties of the Russian Federation with contiguous states on the state frontier and its regime, by other international treaties of the Russian Federation, by this law, and by decisions of the Government of the Russian Federation.

Persons, aircraft, nonnaval sea and river vessels, naval ships, and other transport facilities crossing the state frontier in violation of the rules established by this law are declared violators of the state frontier.

Proceedings specified by the legislation of the Russian Federation are instituted against foreign citizens and stateless persons, who do not have the status of persons residing or staying on the territory of the Russian Federation and who crossed the state frontier from the territory of a foreign state, if there are elements of a crime or of an administrative infringement of the law in their actions.

In cases when, with respect to the violators of the state frontier indicated in the third part of this article, there are no grounds for the institution of criminal proceedings or proceedings in administrative infringements of the law and they do not enjoy the right to receive a political asylum granted by the Constitution (Basic Law) of the Russian Federation, border troops hand them over officially to the authorities of the state, from the territory of which they crossed the state frontier. If the handing over of violators to the authorities of a foreign state is not specified by the treaty of the Russian Federation with this state, border troops expel them outside the Russian Federation to places determined by border troops. The expulsion of foreign citizens and stateless persons outside the Russian Federation from points of passage through the state frontier is reported to the authorities of the state, to (or across) the territory of

which they are expelled, if this is specified by the treaty of the Russian Federation with the corresponding state. Violators of the state frontier against whom administrative proceeding are instituted, with respect to whom decisions on their administrative expulsion have been made, are expelled outside the Russian Federation in accordance with the same procedure.

Citizens of the Russian Federation arriving at points of passage through the state frontier, who lost documents for the right of entry into the Russian Federation during the period of stay abroad, are left at points of passage through the state frontier for the time needed by competent bodies to identify them and to clarify the circumstances of the loss of documents. The conditions of their stay at points of passage through the state frontier are determined by the Russian Federation Ministry of Security and by Russian Federation transport ministries and departments in coordination with the general procuracy of the Russian Federation.

Article 15. Border Representatives of the Russian Federation

In order to resolve matters concerning the observance of the regime of the state frontier and to settle border incidents, the Government of the Russian Federation in accordance with international treaties appoints border representatives of the Russian Federation (border commissars, border commissioners, and their deputies) for certain sections of the state frontier.

In their activity border representatives are guided by this law, by other legislative acts of the Russian Federation, by international treaties of the Russian Federation, and by the Statute on Border Representatives of the Russian Federation approved by the Government of the Russian Federation.

The settlement of border incidents connected with the actions of Russian or foreign military aircraft and naval ships, other military facilities, or servicemen is made by representatives of the Russian Federation Ministry of Defense and, if necessary, with the participation of border representatives of the Russian Federation.

Matters and incidents not settled by border representatives of the Russian Federation or by representatives of the Russian Federation Ministry of Defense are resolved through diplomatic channels.

SECTION IV. BOUNDARY REGIME

Article 16. Maintenance and Establishment of the Boundary Regime

The boundary regime—the regime of the frontier zone, the territorial waters of the Russian Federation, and its internal waters with an outlet to the state frontier (hereinafter, internal waters)—serves exclusively the interests of creation of the conditions necessary for the protection of the state frontier.

The boundary regime includes rules for:

- entry (passage), temporary stay, and movement of persons and transport facilities in the frontier zone;
- economic, fishing, and other activity and implementation of mass sociopolitical, cultural, and other measures in the frontier zone;
- registration and maintenance of small Russian self-propelled and nonself-propelled (surface and underwater) craft and means of conveyance on ice and their navigation and movement on ice in the territorial and internal waters of the Russian Federation and in the Russian part of waters of boundary rivers, lakes, and other reservoirs;
- conduct of fishing, research, exploration, and other activity in the territorial and internal waters of the Russian Federation and in the Russian part of waters of boundary rivers, lakes, and other reservoirs.

The establishment of other rules of the boundary regime is not permitted. Any restriction of citizens' rights and freedoms is permissible only on the basis of and in accordance with the procedure specified by law.

The frontier zone includes the zone of a locality up to 5 km wide along the state frontier on land, of the sea coast of the Russian Federation, and of Russian banks of boundary rivers, lakes, and other reservoirs and islands on the indicated reservoirs. The frontier zone may not include territories of settlements, sanatoriums, rest homes, other health-improving institutions, and cultural institutions (facilities), as well as places of mass rest, active water use, and performance of religious rites and other places for citizens' traditional mass stay. Warning signs are installed at entries into the frontier zone.

On the basis of the nature of relations of the Russian Federation with a contiguous state at individual sections of the state frontier a frontier zone may not be established.

The limits of the frontier zone are determined and warning signs are installed by decisions of bodies of state administration of republics within the Russian Federation, krais, oblasts, the autonomous oblast, and autonomous okrugs.

Sections (regions) of the internal waters of the Russian Federation, within which the boundary regime is established, are determined in accordance with the same procedure.

The specific content and space and time limits of operation of the rules concerning the boundary regime specified by this law and the circle of people, with regard to whom certain rules are in effect, are established by decisions of bodies of state administration of republics within the Russian Federation, krais, oblasts, the autonomous oblast, and autonomous okrugs in coordination with senior officials of border troops on the territories of republics within the Russian Federation, krais, oblasts, the autonomous oblast, and autonomous okrugs and are subject to publication.

Article 17. Entry (Passage), Temporary Stay, and Movement of Persons and Transport Facilities in the Frontier Zone

The entry (passage) of persons and transport facilities into the frontier zone is carried out according to identification documents and individual or collective permits issued by border troops on the basis of citizens' personal applications or petitions by enterprises and their associations, organizations, institutions, and public associations. Places of entry (passage) into the frontier zone are established. The time of entry (passage), routes of movement, and length and other conditions of stay of persons and transport facilities in the frontier zone can be determined.

Article 18. Economic, Fishing, and Other Activity and Implementation of Mass Sociopolitical, Cultural, and Other Measures in the Frontier Zone

Economic, fishing, and other activity connected with the use of land, forests, mineral resources, and waters and the implementation of mass sociopolitical, cultural, and other measures in the frontier zone are regulated by the legislation of the Russian Federation and of republics within the Russian Federation and by legal acts of krais, oblasts, the autonomous oblast, and autonomous okrugs. Specific operations and measures are carried out with the authorization of border troops.

The authorization for the execution of an operation or a measure, except for matters specified by Article 17 of this law, includes the determination of the place and time of execution, the number of participants, and the person responsible for their execution. For regular operations and measures permanent places for carrying them out can be established.

Article 19. Keeping and Grazing of Livestock at the State Frontier

For the purpose of preventing the transmission of infectious diseases across the state frontier, the keeping and grazing of livestock in the zone of the locality (quarantine zone) along the state frontier on land can be prohibited or restricted.

The quarantine zone, its width, fencing procedure, and veterinary regime are established by the Russian Federation Ministry of Agriculture, or on its instructions by bodies of veterinary supervision of republics within the Russian Federation, krais, oblasts, the autonomous oblast, and autonomous okrugs. At the same time, the keeping and grazing of livestock in the frontier zone are also carried out in accordance with the procedure specified by articles 17 and 18 of this law.

Article 20. Registration, Maintenance, and Use of Small Russian Vessels and Means of Conveyance on Ice

Small Russian self-propelled and nonself-propelled (surface and underwater) vessels and means of conveyance on ice used in the territorial and internal waters of the Russian Federation and in the Russian part of waters of

boundary rivers, lakes, and other reservoirs are subject to a compulsory registration and storage at piers, docks, and other base facilities. The procedure for the departure of these vessels and means from base facilities and return with notification to border troops can be established and the time of departure, stay on water (on ice), and removal from base facilities and shores can be limited.

Article 21. Conduct of Fishing, Research, Exploration, and Other Activity in Territorial and Internal Waters of the Russian Federation and in the Russian Part of Waters of Boundary Rivers, Lakes, and Other Reservoirs

Fishing, research, exploration, and other activity in the territorial and internal waters of the Russian Federation and in the Russian part of waters of boundary rivers, lakes, and other reservoirs is regulated by the legislation of the Russian Federation and of republics within the Russian Federation and by legal acts of krais, oblasts, the autonomous oblast, and autonomous okrugs and is carried out in accordance with the procedure established in conformity with requirements of articles 9, 18, and 20 of this law.

The activity indicated in the first part of this article is carried out in the territorial waters of the Russian Federation with notification to border troops and in the internal waters of the Russian Federation and in the Russian part of waters of boundary rivers, lakes, and other reservoirs, with their authorization.

SECTION V. REGIME AT POINTS OF PASSAGE THROUGH THE STATE FRONTIER

Article 22. Maintenance and Establishment of the Regime at Points of Passage Through the State Frontier

The regime at points of passage through the state frontier includes rules for the entry of persons and transport facilities into these points and their stay in and departure from them, as well as of the delivery, stay, and removal of goods and animals, which are established exclusively in the interests of creation of the conditions necessary for border, customs, and other types of control.

The regime at points of passage through the state frontier is established by Russian Federation transport ministries and departments in accordance with the provisions of this law and of international treaties of the Russian Federation by normative acts coordinated with border troops and the Russian Federation State Customs Committee.

On the basis of the normative act of the Russian Federation transport ministry or department the chief of an airport, an airfield, a sea or river port, or a railroad and bus terminal or station and the manager of another transport enterprise, with due regard for local conditions, issues an order (instruction) establishing the regime at this point of passage through the state frontier, which is coordinated with appropriate officials of border troops and of customs and other control bodies.

The regime at points of passage through the state frontier equipped outside the transport enterprises indicated in the third part of this article is established by border troops in accordance with the requirements of the second part of this article in coordination with customs and other bodies carrying out at these points the passage of persons, transport facilities, goods, and animals through the state frontier.

Article 23. Procedure for the Entry (Departure) of Persons and Transport Facilities and for the Delivery and Removal of Goods and Animals at Points of Passage Through the State Frontier

The entry of persons and transport facilities into points of passage through the state frontier and their departure from them, as well as the delivery and removal of goods and animals, are carried out at places especially assigned for these purposes according to permits issued by the administration of airports, airfields, sea and river ports, railroad and bus terminals and stations, and other transport enterprises in coordination with border troops.

Article 24. Stay at Points of Passage of Persons and Transport Facilities Through the State Frontier

The places and duration of parking of foreign-going transport facilities at points of passage through the state frontier are determined by the administrations of airports, airfields, sea and river ports, railroad and bus terminals and stations, and other transport enterprises in coordination with border troops and customs bodies.

The access of persons to transport facilities and to foreign-going transport facilities during the period of border and other types of control is restricted and, if necessary, prohibited.

The embarkation of passengers into transport facilities during departure from the Russian Federation and disembarkation during arrival in the Russian Federation, as well as the loading (unloading) of luggage, mail, and freight, are carried out with the authorization of border troops and customs bodies.

On the demand of representatives of border troops officials of transport enterprises and organizations and owners of transport facilities must open for inspection sealed railroad cars, motor vehicles, holds and other spaces of transport facilities, and the freight transported on them.

Foreign-going transport facilities can begin movements for departure from the territory of the Russian Federation or into the depths of the Russian Federation territory, as well as change the parking place, only with the authorization of border troops and customs bodies.

The stay of Russian Federation citizens at points of passage through the state frontier without valid documents for the right of entry into the Russian Federation is regulated in accordance with the procedure specified by the fifth part of Article 14 of this law.

Article 25. Entry and Stay of Foreign Nonnaval Vessels and Naval Ships in Ports (Roadsteads) of the Russian Federation

Foreign nonnaval vessels can enter ports (roadsteads) of the Russian Federation open for the entry of such vessels. The rules for entry and stay in these ports (roadsteads), performance of freight and passenger operations, communication of vessels with the shore, descent of crew members and passengers ashore, and visit to vessels by persons who are not members of the vessel crew and other rules connected with the entry of foreign vessels into ports (roadsteads) of the Russian Federation and stay in them are established by this law, by other legislative acts of the Russian Federation, and by decisions of the Government of the Russian Federation published in IZVESHCHENIYA MOREPLAVATELYAM and in PUTEVYYE LISTKI [TRIP LOGS].

Foreign nonnaval vessels proceeding to ports (roadsteads) of the Russian Federation advise the authorities of the destination port on the time of their arrival.

Nonnaval vessels of foreign states, which have established for Russian vessels an authorization or notification procedure for entry into their ports, enter ports (roadsteads) of the Russian Federation after receiving the authorization of competent Russian bodies for this according to the principle of mutuality.

Unless another procedure is provided, foreign naval ships enter the internal waters and ports of the Russian Federation according to the preliminary authorization of the Government of the Russian Federation. The procedure for the entry and stay of foreign naval ships in the internal waters and ports of the Russian Federation is regulated by the rules established by the Government of the Russian Federation and published in IZVESHCHENIYA MOREPLAVATELYAM.

Article 26. Additional Regime Rules at Points of Passage Through the State Frontier

Territories and premises, where border and other types of control are carried out directly, are determined at points of passage through the state frontier. Additional regime restrictions established within the framework of the rules and in accordance with the procedure specified by articles 22, 23, 24, and 25 of this law are introduced at these places.

SECTION VI. AUTHORITY OF BODIES OF STATE POWER AND ADMINISTRATION IN THE SPHERE OF PROTECTION OF THE STATE FRONTIER

Article 27. Authority of Supreme Bodies of State Power and Administration of the Russian Federation

Supreme bodies of state power and administration of the Russian Federation in the sphere of protection of the state frontier exercise the authority specified by the Russian Federation Constitution (Basic Law) and this law.

Article 28. Authority of Central Bodies of State Administration of the Russian Federation

1. The Russian Federation Ministry of Foreign Affairs:

- on the basis of decisions by supreme bodies of state power and administration of the Russian Federation conducts negotiations on the establishment and consolidation of the state frontier and on the establishment of the regime of the state frontier and prepares the necessary documents and materials;
- administers foreign political and international legal safeguards for the protection of the state frontier;
- within its competence draws up documents for the right of entry into the Russian Federation and of departure from the Russian Federation for Russian Federation citizens, foreign citizens, and stateless persons;
- resolves problems concerning the observance of the regime of the state frontier and incidents at the state frontier not settled by border representatives of the Russian Federation or by the Russian Federation Ministry of Defense.

2. The Russian Federation Ministry of Security:

- ensures the protection of vitally important interests of the individual, society, and the state at the state frontier in the general system for safeguarding the security of the Russian Federation;
- conducts an analysis and forecasting of the political, socioeconomic, and criminogenic situation in frontier regions of the Russian Federation through the international communication channel, as well as of crisis situations in contiguous states, which affect the security of the Russian Federation at the state frontier, and organizes the acquisition of information for these purposes;
- directs the operational investigation work of federal bodies of state security on uncovering, preventing, and stopping the illegal activity of foreign special services and organizations, criminal groups, and individual persons across the state frontier;
- interacts and maintains contacts with special services of foreign states in the interests of protection of the state frontier;
- participates in the safeguarding of security during the implementation of mass measures of a federal or international nature at the state frontier and in frontier regions of the Russian Federation;
- carries out the management of border troops.

3. The Russian Federation Ministry of Defense:

- bears responsibility for the protection of the state frontier in the air space and in the underwater environment;

- ensures the participation of the Armed Forces of the Russian Federation in the protection of the state frontier on land, sea, boundary rivers, lakes, and other reservoirs in cases and in accordance with the procedure determined by this law and by other legislative acts of the Russian Federation;

- within its competence resolves incidents connected with a violation of the regime of the state frontier;

- renders assistance to border troops in resource, reconnaissance, and other support for the protection of the state frontier on the basis of the legislation of the Russian Federation and interdepartmental agreements.

4. Russian Federation ministries and departments exercising customs, sanitary-quarantine, veterinary, phytosanitary, and other types of control at the state frontier:

- organize and implement measures for the protection of economic, ecological, and other interests of the individual, society, and the state at the state frontier;

- within their competence issue normative acts, the execution of which is binding upon all juridical and natural persons on the territory of the Russian Federation;

- control the observance of the requirements of international treaties of the Russian Federation and of the legislation of the Russian Federation on matters within their competence by enterprises, organizations, institutions, public associations, and citizens;

- in the necessary cases establish control bodies (points) at points of passage through the state frontier, organize their work, and establish means and methods of control in accordance with the requirements of the sixth part of Article 11 of this law;

- interact with each other and render assistance to border troops in the protection of the state frontier;

- cooperate in the protection of the state frontier with corresponding bodies of foreign states.

5. The Russian Federation Ministry of Internal Affairs:

- renders assistance to border troops in the implementation of measures for the protection of the state frontier, in the fight against illegal activity through it, in the investigation of persons violating the regime of the state frontier, and in the clarification and check of the circumstances of infringements of the law by citizens detained in accordance with administrative or criminal procedure;

- informs border troops about the state of law and order in frontier regions of the Russian Federation, the exposed unlawful actions, and criminal groups and persons having unlawful aspirations with respect to the state frontier and border troops;

- ensures the participation of internal troops of the Russian Federation Ministry of Internal Affairs in the protection of the state frontier in cases and in accordance with the procedure specified by this law;
- ensures the participation of bodies of internal affairs in control over the observance of the boundary regime and the regime at points of passage through the state frontier;
- on the recommendations of border troops ensures a temporary restriction or prohibition of citizens' access to individual sections of a locality, or to facilities near the state frontier, during a search for violators of the state frontier, repulsion of an armed invasion, or mass transfers of citizens of a contiguous state to the territory of the Russian Federation;
- ensures public order during the implementation of mass measures of a federal or international nature at the state frontier and in frontier regions of the Russian Federation;
- ensures law and order in frontier regions during emergency situations and the imposition of a state of emergency;
- participates in the legal education of the population in frontier regions of the Russian Federation and in the prevention, jointly with border troops, of infringements of the law at the state frontier and at points of passage through it.

Article 29. Authority of Supreme Bodies of State Power and Administration of Republics Within the Russian Federation and of Bodies of State Power and Administration of Krays, Oblasts, the Autonomous Oblast, Autonomous Okrugs, and the Cities of Moscow and St. Petersburg

Supreme bodies of state power and administration of republics within the Russian Federation and bodies of state power and administration of krays, oblasts, the autonomous oblast, autonomous okrugs, and the cities of Moscow and St. Petersburg:

- provide conditions for the protection of the state frontier for troops and bodies authorized for this by law and for these purposes adopt normative and administrative acts within the limits established by this law;
- in accordance with the legislation of the Russian Federation grant land plots for the needs of protection of the state frontier and exercise control over the use of land and the observance of the legislation of the Russian Federation on the protection of the natural environment at these sections;
- inform border troops about matters concerning the situation in frontier regions of the Russian Federation;
- create conditions for citizens' participation on a voluntary basis in the protection of the state frontier;

- control on their territories the execution of the legislation of the Russian Federation on the state frontier by all bodies, enterprises, institutions, organizations, and public associations, as well as by officials and citizens.

SECTION VII. AUTHORITY OF BORDER TROOPS, AIR DEFENSE AND NAVY TROOPS, AND OTHER TROOPS AND MILITARY UNITS OF THE RUSSIAN FEDERATION IN THE SPHERE OF PROTECTION OF THE STATE FRONTIER

Article 30. Authority of Border Troops

Border troops protect the state frontier on land, sea, rivers, lakes, and other reservoirs, as well as at points of passage through the state frontier. For these purposes they:

- ensure by military and technical measures the prevention of an unlawful change of passage through the state frontier at a locality;
- exercise control over the observance of rules—which are of the nature of authorization or notification—of the regime of the state frontier, the boundary regime, and the regime at points of passage through the state frontier;
- conduct operational investigation, counterintelligence, and intelligence activity;
- institute proceedings in administrative infringements of the law placed under their jurisdiction by the legislation of the Russian Federation; within their competence examine these cases and execute the decisions on them;
- conduct the investigation of cases placed by the legislation of the Russian Federation under their authority;
- are engaged in the prevention of infringements of the law, the fight against which is within the competence of border troops;
- participate in the activity of border representatives of the Russian Federation;
- if necessary, conduct border searches and operations.

Within the frontier zone, the Russian part of waters of boundary rivers, lakes, and other reservoirs, and the territorial waters and internal rivers of the Russian Federation, where the boundary regime is established, and at points of passage through the state frontier, as well as on territories of administrative regions and cities adjoining the state frontier, the boundary zone, banks of boundary rivers, lakes, and other reservoirs, the sea coast, or a point of passage, border troops have the right:

- 1) to erect the necessary engineering and technical structures, carry out the construction of communication and service lines, and place and use equipment and arms on land granted in accordance with the legislation of the

Russian Federation for indefinite (permanent) use according to the established norms;

2) to be at any sections of a locality and to move on them during the fulfillment of official obligations; to demand from owners and users of land plots in the frontier zone the allocation of places for the movement of border details and for the equipment and maintenance of passages through fences and of crossings through other obstacles in proper condition; to accompany nonnaval vessels and other transport facilities and to deploy border details on them; for the purpose of preventing and stopping violations of the regime of the state frontier, the boundary regime, and the regime at points of passage through the state frontier, to check the necessary documents of persons and documents of transport facilities and to make an examination (inspection) of transport facilities and of the freight transported on them;

3) to carry out the detention and personal examination by border details of persons, with respect to whom there are grounds for suspecting them of a violation of the regime of the state frontier, the boundary regime, and the regime at points of passage through the state frontier, and the delivery of such persons to the location of subunits and units of border troops, or to other places, for clarification of the circumstances of the violation; to stop, inspect, and detain nonnaval vessels, which committed violations of the indicated regimes, by border ships and to deliver (escort) them to the nearest Russian port for clarification of the circumstances of the violation. The operation of a vessel's radio stations is not permitted during its inspection and escort. A report is made on every case of a vessel's inspection and detention. Vessel and freight documents confiscated from the captain are attached to the vessel detention report;

4) to carry out the administrative detention of persons, who committed violations of the regime of the state frontier, the boundary regime, or the regime at points of passage through the state frontier, for the period of up to 3 hours in order to draw up a protocol and, in necessary cases, for the purpose of identification and clarification of the circumstances of the infringement of the law, up to 3 days with a written report on this to the procurator within 24 hours from the time of detention, or for the period of up to 10 days with the procurator's approval, if the transgressors do not have identification documents; to subject those detained to a personal examination, as well as to examine and, if necessary, to confiscate their personal effects, other things in their ownership or possession, and documents. A protocol is drawn up on every case of administrative detention, personal examination of the detained person, and examination and confiscation of his personal effects;

5) with the procurator's approval to detain foreign citizens and stateless persons, who made an illegal crossing of the state frontier, with respect to whom—on the grounds specified by the fourth part of Article 14 of this law—decisions were adopted on handing them over to the authorities of contiguous states or on expelling

them from the Russian Federation, or rulings were adopted on their administrative expulsion from the Russian Federation for the time necessary for the execution of the decision or ruling;

6) to keep persons subject to administrative detention on premises of border troops especially equipped for these purposes and persons detained in accordance with criminal procedure, in temporary solitary confinement cells, or on premises of frontier troops especially equipped for the confinement of persons subject to administrative detention, and in necessary cases to place such persons in solitary investigation cells, temporary solitary confinement cells, and other especially equipped premises of bodies of internal affairs;

7) to invite persons to subunits of border troops and to receive from them explanations about the circumstances—known to them—of the illegal crossing of the state frontier, or of another violation of the regime of the state frontier, the boundary regime, or the regime at points of passage through the state frontier. In necessary cases explanations about the circumstances of the indicated violations can also be received at other places. In case of nonappearance when invited, such persons can be subject to arrest;

8) to make appropriate notes in documents for the right to cross the state frontier and, if necessary, to confiscate such documents temporarily, as well as to confiscate someone else's and forged documents;

9) in the absence of customs bodies, to seize weapons, ammunition, narcotic substances, currency, currency assets, and other goods illegally transferred across the state frontier, which are uncovered during border control;

10) to temporarily restrict or prohibit the movement of persons and transport facilities, including small vessels and means of conveyance on ice, as well as to bar citizens from individual sections of a locality, to compel them to remain there, or to leave these sections for the purpose of protecting people's health and life during the conduct of border searches, operations, and other investigation activities, as well as actions connected with criminal cases and cases of administrative infringements of the law;

11) when a threat to the interests of the Russian Federation at the state frontier arises, to temporarily restrict—with notification to bodies of local self-administration, interested enterprises, institutions, and organizations—the performance of various operations, with the exception of operations of defense significance and operations connected with natural calamities or especially dangerous infectious diseases;

12) to enter at any time of the day or night citizens' dwellings and other premises and the territories and premises of enterprises, institutions, and organizations, except those having diplomatic immunity, and to inspect them during the prosecution of persons, with respect to

whom there are sufficient grounds for suspecting them of a violation of the regime of the state frontier. If the entry into a dwelling is made without the consent of the persons living in it, the procurator is notified of this within 24 hours;

13) to freely use means of communication for official purposes and—during the repulsion of invasions of the territory of the Russian Federation, conduct of search activities, and delivery of persons suspected of the commission of infringements of the law—transport facilities belonging to enterprises (irrespective of forms of ownership), institutions, organizations, public associations, and, in necessary cases, to citizens with reimbursements to owners, on demand, for expenses or for the damage done in accordance with the procedure established by law. Means of communication and transport belonging to diplomatic, consular, and other missions of foreign states and to international organizations and special-purpose transport facilities constitute an exception;

14) to request and receive free of charge from state bodies, enterprises and their associations, institutions, organizations, and public associations information necessary for the performance of duties imposed by law on border troops, with the exception of cases when the law establishes a special procedure for the acquisition of information;

15) to carry out the registration of persons and to keep records of actual data and statistics necessary for control over the maintenance of the regime of the state frontier, the boundary regime, and the regime at points of passage through the state frontier and for these purposes to use information systems in accordance with a procedure not contradicting the law;

16) to submit recommendations on the elimination of the causes and conditions promoting the commission of infringements of the law, the investigation of or proceedings in which are placed under the authority of border troops, to state bodies, enterprises and their associations, institutions, organizations, and public associations;

17) to give incentives to citizens who distinguished themselves in the protection of the state frontier;

18) to use arms, combat equipment, special facilities, physical force, and guard dogs in accordance with the procedure and in cases specified by this law;

19) in the territorial and internal waters of the Russian Federation and in the Russian part of waters of boundary rivers, lakes, and other reservoirs with respect to nonnaval vessels, furthermore:

—to order a vessel to show its flag if it is not raised; to interrogate the vessel about the purposes of its entry into these waters;

—to order a vessel to change the course if it leads to a region prohibited for navigation, or can entail another violation of the navigation regime;

—to stop a vessel and to inspect it if it does not raise its flag, does not respond to interrogation signals, does not submit to the demand to change the course, or violates generally acknowledged principles and norms of international law. According to the results of the vessel's inspection it can be permitted to continue navigation (stay) in the waters of the Russian Federation with the observance of the established rules, or ordered to leave the waters of the Russian Federation, or it can be detained according to the requirements of this law;

—to remove from the vessel and to detain persons who have committed crimes and are subject to criminal responsibility according to the legislation of the Russian Federation and to hand these persons over to inquest and investigation bodies, unless otherwise stipulated by international treaties of the Russian Federation;

—to pursue and detain on the open sea a vessel that has violated the rules of navigation (stay) in the waters of the Russian Federation before the entry of this vessel into the territorial sea of its country or a third state, if the pursuit was begun in the waters of the Russian Federation, after a visual or sound signal to stop was given from a distance enabling the vessel to see or hear this signal, and was carried out continuously.

During the conduct of border searches and operations on the territory of the Russian Federation border troops can also use the rights granted to them outside the limits established in the second part of this article.

During the performance of official missions ships and aircraft (helicopters) of border troops are granted the right to a gratuitous:

—use of the water and air space of the Russian Federation, sea and river ports, airports, and airfields (landing fields) on the Russian territory irrespective of their belonging and function.

—acquisition of navigational, meteorological, hydrographic, and other information;

—flight and navigation support.

Other rights can be granted to border troops only by law.

The use by border troops of the rights granted to them for the performance of missions not entrusted to them by law is not permitted.

Article 31. Authority of Air Defense Troops

Air defense troops protect the state frontier in the air space:

—control the observance of the rules for the crossing of the state frontier; stop flights and take steps for the landing on the territory of the Russian Federation of

aircraft illegally crossing the state frontier or violating the procedure for the use of the air space of the Russian Federation;

—render assistance to aircraft illegally crossing the state frontier in cases of force-majeure circumstances or of unintentional actions of these aircraft crews, by restoring their orientation and leading them to the landing airfield on the territory of the Russian Federation or outside the air space of the Russian Federation.

Air defense troops have the right:

1) to use the facilities available to them to identify aircraft in the air space of the Russian Federation and in the air space outside the territorial waters of the Russian Federation up to the borders of foreign states when a threat of an illegal crossing arises, or during an illegal crossing of the state frontier;

2) in necessary cases, in accordance with the procedure established by the Government of the Russian Federation, to enlist forces and facilities of other types of the Armed Forces of the Russian Federation and of state bodies for clarification of the situation in the air space and the adoption of measures to prevent or stop an illegal crossing of the state frontier in the air space;

3) to completely prohibit or restrict flights of aircraft in individual regions of the air space of the Russian Federation when a threat of an illegal crossing of the state frontier by them arises;

4) to invite crew members of aircraft illegally crossing the state frontier, after their landing on the territory of the Russian Federation, to subunits of the Armed Forces of the Russian Federation or to other places for clarification of the circumstances of illegal crossing and to hand them over to inquest and investigation bodies, unless otherwise specified by international treaties of the Russian Federation;

5) to use combat equipment and arms in accordance with this law.

Article 32. Authority of the Navy

The Navy carries out the protection of the state frontier in the underwater environment.

In their zones of responsibility for the maintenance of an operational regime in naval theaters naval forces:

—control the crossing of the state frontier;

—carry out antisubmarine, including underwater commando, defense in the interests of the security of the Russian Federation;

—during the detection of underwater objects in the territorial and internal waters of the Russian Federation, as well as outside them (in case a threat of an illegal crossing of the state frontier by these objects arises), in accordance with the norms of international

law and international treaties of the Russian Federation in the military area, take steps to stop or prevent the actions of the detected objects;

—use combat equipment and arms in accordance with this law.

Article 33. Participation of the Armed Forces of the Russian Federation, Internal Troops of the Russian Federation Ministry of Internal Affairs, and Other Troops and Military Units of the Russian Federation in the Protection of the State Frontier by Border Troops

The protection of the state frontier at individual sections on land, the sea coast, and banks of boundary rivers, lakes, and other reservoirs in the part of the prohibition of an illegal crossing of the frontier at places of stationing of military objects and garrisons of the Armed Forces of the Russian Federation, of internal troops of the Russian Federation Ministry of Internal Affairs, and of other troops and military units of the Russian Federation, which are closed for passage by unauthorized persons and transport facilities, is entrusted to the command of the indicated military objects and garrisons. Such sections are determined jointly by commanding troops of frontier districts, groups of border troops and commanding troops of military districts, fleets, flotillas, internal troops of districts, and commanders (chiefs) of other troops and military units and are affirmed by appropriate documents.

The Armed Forces of the Russian Federation, internal troops of the Russian Federation Ministry of Internal Affairs, and other troops and military units of the Russian Federation assign to border troops forces and equipment for participation in border searches and operations in accordance with the procedure determined by joint decisions of corresponding ministries and departments of the Russian Federation.

Another participation of the Armed Forces of the Russian Federation, internal troops of the Russian Federation Ministry of Internal Affairs, and other troops and military units of the Russian Federation in the protection of the state frontier takes place only on the basis of the legislation of the Russian Federation.

Article 34. Interaction in the Protection of the State Frontier

Border troops, air defense troops, and the Navy:

—render assistance to each other during the performance of the obligations concerning the protection of the state frontier imposed on them;

—within the authority established by this law coordinate the actions of state bodies exercising various types of control over the maintenance of regimes at the state frontier, not interfering in these actions;

—organize directly at the state frontier the interaction of their forces and state bodies, enterprises (irrespective of forms of ownership), institutions, organizations,

and public associations participating in the protection of the state frontier or carrying out activity affecting the interests of the protection of the state frontier. Commanders of border troops, air defense troops, and the Navy within their competence issue orders on matters concerning the observance of regimes at the state frontier, the execution of which is binding upon all bodies, enterprises, institutions, organizations, public associations, officials, and citizens on the territory of the Russian Federation;

- carry out interaction in the protection of the state frontier with appropriate bodies, troops, and fleets of foreign states in accordance with the procedure established by international treaties of the Russian Federation of an interdepartmental nature.

Article 35. Use of Arms and Combat Equipment

Border troops, air defense troops, and naval forces, carrying out the protection of the state frontier, use arms and combat equipment to repulse an armed invasion of the territory of the Russian Federation and to prevent attempts to hijack abroad aircraft, sea and river vessels, and other transport facilities without passengers.

Arms and combat equipment can also be used: against persons, aircraft, sea and river vessels, and other transport facilities, which crossed (cross) the state frontier in violation of the rules established by this law, in response to their use of force, or in cases when the stopping of a violation or detention of violators cannot be carried out by other means; to protect citizens against an attack threatening their life and health and to free hostages; to repel an attack on servicemen, persons fulfilling official obligations or public duty concerning the protection of the state frontier, and their family members when their life is subject to immediate danger; to repel an attack on subunits and objects of border troops, air defense troops, and the Navy, including to render assistance to ships (motor boats), airplanes, and helicopters during a repulsion of an armed attack on them.

The use of arms and combat equipment should be preceded by a clearly expressed warning about the intention to use them and by warning shots.

Without a warning arms and combat equipment can be used during a sudden or armed attack on servicemen and other citizens, an attack with the use of combat equipment, aircraft, sea and river vessels, and other transport facilities, an armed resistance, and an escape of detained persons carrying arms, and to free hostages.

Servicemen have the right to use arms to render harmless animals threatening the life and health of servicemen and other citizens, as well as to give an alarm or a call-for-help signal.

It is prohibited to use arms and combat equipment against women and minors, except for cases of an armed attack on their part, or an armed resistance, or a life threatening group attack; against aircraft, sea and river

vessels, and other transport facilities with passengers; against persons who illegally crossed or attempt to cross the state frontier, if this happens obviously by accident, or in connection with an accident or the effect of insurmountable forces of nature.

The procedure for the use of arms and combat equipment is determined by the Government of the Russian Federation.

Servicemen of other types of Armed Forces of the Russian Federation and of other troops and military units of the Russian Federation enlisted for the protection of the state frontier can use arms and combat equipment in accordance with the requirements of this article.

Article 36. Use of Special Equipment

During the fulfillment of obligations concerning the protection of the state frontier servicemen use special equipment (handcuffs or improvised means of tying, rubber sticks, tear substances, light and sound devices of a diverting effect, and devices for a compulsory stopping of transport), physical force, including combat methods of fighting, and guard dogs in accordance with the third part of Article 12 and fourth and fifth parts of Article 14 of the RSFSR Law on Militia. The complete list of special equipment adopted by border troops and the grounds and rules for their use in the protection of the state frontier by servicemen of border troops, as well as by servicemen of the Armed Forces of the Russian Federation and of other troops and military units of the Russian Federation, are established by the Government of the Russian Federation.

SECTION VIII. PARTICIPATION OF BODIES OF LOCAL SELF-ADMINISTRATION, ENTERPRISES AND THEIR ASSOCIATIONS, INSTITUTIONS, ORGANIZATIONS, PUBLIC ASSOCIATIONS, AND CITIZENS IN THE PROTECTION OF THE STATE FRONTIER

Article 37. Authority of Bodies of Local Self-Administration, Enterprises and Their Associations, Institutions, Organizations, and Public Associations of the Russian Federation in the Sphere of Protection of the State Frontier

Bodies of local self-administration, enterprises and their associations (irrespective of forms of ownership), institutions, organizations, public associations, and their officials:

- render assistance to border troops, air defense troops, the Navy, and state bodies exercising various types of control at the state frontier, execute their legal commands, and give the information necessary for their activity;
- create conditions for citizens' participation on a voluntary basis in the protection of the state frontier.

Article 38. Citizens' Participation in the Protection of the State Frontier

Citizens participate on a voluntary basis in the protection of the state frontier as members of voluntary people's squads, as nonstaff workers among border troops, and in other forms. The procedure for enlisting citizens for the protection of the state frontier is determined by the Government of the Russian Federation.

SECTION IX. LEGAL AND SOCIAL PROTECTION FOR SERVICEMEN AND OTHER CITIZENS PARTICIPATING IN THE PROTECTION OF THE STATE FRONTIER

Article 39. Legal Protection for Servicemen Participating in the Protection of the State Frontier and for Their Family Members

Servicemen directly participating in the protection of the state frontier are given the status of servicemen fulfilling special obligations established by the Russian Federation Law on the Status of Servicemen. They are representatives of the authorities and are under state protection. The execution of their legal demands is binding upon citizens and officials. No one, except for persons especially authorized for this by law, has the right to interfere in their activity.

Hindrance of the fulfillment by servicemen of obligations concerning the protection of the state frontier and encroachment on the life, health, honor, dignity, and property of a serviceman or his family members in connection with his fulfillment of these obligations entail criminal or administrative responsibility specified by the legislation of the Russian Federation.

Article 40. Legal Protection for Citizens Participating in the Protection of the State Frontier and for Their Family Members

Unlawful actions against citizens and their family members in connection with the rendering of assistance by citizens to border troops in the protection of the state frontier entail responsibility established by the legislation of the Russian Federation.

Article 41. Social Protection for Servicemen and Other Citizens Participating in the Protection of the State Frontier

Social protection for servicemen and other citizens directly participating in the protection of the state frontier is guaranteed by the legislation of the Russian Federation.

Article 42. Establishment of Additional Guarantees and Compensations for Servicemen and Other Citizens Participating in the Protection of the State Frontier

Other guarantees and compensations, in addition to those specified by this law, can also be established for servicemen and other citizens participating in the protection of the state frontier by the legislation of the Russian Federation and by decisions of the Government

of the Russian Federation and of directors of Russian Federation ministries and departments (within their authority).

SECTION X. RESPONSIBILITY FOR INFRINGEMENTS OF THE LAW AT THE STATE FRONTIER

Article 43. Responsibility for Infringements of the Law at the State Frontier

Persons guilty of a violation of the rules of the regime of the state frontier, the boundary regime, and the regime at points of passage through the state frontier bear criminal or administrative responsibility specified by the legislation of the Russian Federation and of republics within the Russian Federation and by legal acts of krais, oblasts, the autonomous oblast, autonomous okrugs, and cities of Moscow and St. Petersburg.

SECTION XI. RESOURCE SUPPORT FOR THE PROTECTION OF THE STATE FRONTIER

Article 44. Financial Support for the Protection of the State Frontier

Financial support for the protection of the state frontier is provided from the republican budget of the Russian Federation and extrabudgetary funds.

Extrabudgetary funds of border troops receive 25 percent of the amounts of fines imposed for the crimes and administrative infringements of the law uncovered by them, which are connected with violations of the rules of the regime of the state frontier, the boundary regime, and the regime at points of passage through the state frontier, and of the value of the property confiscated by vessels for such crimes and administrative infringements of the law, as well as of the smuggled goods seized in accordance with point 9 of the second part of Article 30 of this law. Extrabudgetary funds are used to improve social security for servicemen, workers, and employees of border troops and their family members in accordance with the procedure determined by the Russian Federation Ministry of Security.

Article 45. Logistic Support for the Protection of the State Frontier

Logistic support for the protection of the state frontier is provided from state land, material-technical, and other funds of the Russian Federation.

The norms of and procedure for logistic support are established by the Government of the Russian Federation.

[Signed] B. Yeltsin, president of the Russian Federation
Moscow, Russia's House of Soviets
1 April 1993
No 4730-1

Decree on Reexamination of Law on State Frontier

935D0378C Moscow FEDERATSIYA in Russian
No 47, 27 Apr 93 (signed to press 26 Apr 93) p 5

[Decree of the Supreme Soviet of the Russian Federation on Reexamination of the Russian Federation Law on the State Frontier of the Russian Federation]

[Text] Having reexamined the Russian Federation Law on the State Frontier of the Russian Federation, which was returned by the President of the Russian Federation, the Supreme Soviet of the Russian Federation decrees:

To adopt the Russian Federation Law on the State Frontier of the Russian Federation with the remarks by the President of the Russian Federation and editorial clarifications taken into consideration.

[Signed] R. I. Khasbulatov, chairman of the Supreme Soviet of the Russian Federation
Moscow, Russia's House of Soviets
1 April 1993
No 4731-1

Decree on Implementation Procedure

935D0378D Moscow FEDERATSIYA in Russian
No 47, 27 Apr 93 (signed to press 26 Apr 93) p 5

[Decree of the Supreme Soviet of the Russian Federation on the Procedure for the Implementation of the Russian Federation Law on the State Frontier of the Russian Federation]

[Text] The Supreme Soviet of the Russian Federation decrees:

1. To implement the Russian Federation Law on the State Frontier of the Russian Federation from the moment of its publication.

2. Prior to the conclusion of treaties on the passage through the state frontier of the Russian Federation with contiguous states—former USSR Union republics—to give the frontier with these states the status of the state frontier of the Russian Federation.

3. To invite the President of the Russian Federation, the Government of the Russian Federation, supreme soviets and heads of executive power (presidents) of republics within the Russian Federation, soviets of people's deputies and heads of administrations of krais, oblasts, the autonomous oblast, autonomous okrugs, and cities of Moscow and St. Petersburg, and directors of ministries, state committees, and departments of the Russian Federation before 1 October 1993 to bring corresponding normative and other acts into conformity with the indicated law.

4. The Government of the Russian Federation:

—prior to 1 August 1993 shall report to the Supreme Soviet of the Russian Federation on the course of the process of negotiation with states—former USSR Union republics—on the status, procedure, and periods of stay of units and formations of border troops of the Russian Federation on the territory of these states and on the urgent steps to establish them at the state frontier of the Russian Federation;

—prior to 1 August 1993 shall submit to the Supreme Soviet of the Russian Federation proposals on bringing legislative acts of the Russian Federation into conformity with the indicated law.

[Signed] R. I. Khasbulatov, chairman of the Supreme Soviet of the Russian Federation
Moscow, Russia's House of Soviets
1 April 1993
No 4732-1

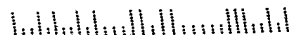
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